24-month Chronic and Carcinogenic Inhalation Toxicological Study of Methanol in Fischer Rats

(Vol. 3)

Tables of Average Values (2)

September 30, 1985

Mitsubishi Chemical Safety Institute, Ltd.

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TABLE 13 - 1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

	SEX :		MALE					FEMALE	L E		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000		52	10	100	1000	
PERITONEUM	(NO. EXAMINED) : (2) (1)(3) (3)	V	1) (0) (0	1) (5)	
HEMORRHAGE	1 + + +	N000	.000	7 0 0 7	m000		4000	0000	4,000	0000	
INFLAMMATION	·	N O O O	1000	m000	N H O O		1000	0000	1000	N O O O	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE		
Z O		
O _R		
NIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE	PERIOD)	
DEAD, KILLED	(TREATMENT	
FOUND		
ANIMALS		

	SEX :		MALE					FEMALE	ш		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	1	1000	! ! !	52	10	100	1000	
DIAPHRAGM	(NO. EXAMINED) : () (0) (0	1)(! !	Ü) (0	0) (0) (0	(0	
	1)										
HEMORRHAGE	ı	0	0	0	0		0	0 (0.0	0 (
	+ + +	00	00	00.	00(000	000	000	000	
	+++	0	0	~ 1	၁		>	5	>	5	

1) GRADE: - ' NEGATIVE; + ' SLIGHT; ++ ' MODERATE; +++ ' SEVERE.

TABLE

4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

STUDY NO. 83004

	! ! ! ! !	SEX:		! ! !	MALE	 	! ! ! ! !			FEMALE	Н		1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL ON NO.	LEVEL (PPM) : NO. NECROPSIED :		52	10 52	100 1	1000		52	10	100	52	
HEART	(NO. E)	EXAMINED) :	\smile	52)(18)(10)(52)	S	52)(19)(20)(52)	
ENDOCARDITIS		+ + + + + +		52 0 0	78 000 000	0000	0 0 0 0		11 0 0	000	0 0 0	52 0 0	
FIBROSIS		! + + + + + +		13 24 14	100 000	0 1 7 8	2 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		113 35 0	* 0 0 0 0	13 6 0	37 5 0	
MIGRATION OF HEMOSIDERIN-LADEN CELLS	ADEN	! + + + + + +		45 10 0	13 0 0	10 0 0	8 7 0 0		52 0 0 0	6 0 0 0	0000	0 0 0 0	
немоккнабе		1 + + + + + + + +		0 0 0 0	17 0 0	10 0 0	S 0 0 0		88 000 000	0 0 0	5000	52 000 0	
HYPERPLASIA OF ENDOCARDIAL CELLS	CELLS	1 + + + + + +		S 2 0 0 0	18 0 0	10 0 0	5.2 0 0 0		51 0 0	1000	2000	S 0 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

TABLE 13 - 4

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

	ш
INDINGS	SCHEDUL
ш_	O
) I	OR
NON-NEOPLASTIC	D IN EXTREMIS PERIOD)
	PEIN
0 F	LED
NCE	KILLEI TMENT
INCIDENCE	DEAD, KILLE C TREATMENT
TOTAL	FOUND
	ANIMALS

ORGAN FINDINGS CONTINUED) (CONTINUED) (NO. EXAMINED) INFILTRATION OF LEUCOCYTES	S. S. E. S.	25 25 20 00 00 00 00 00 00 00 00 00 00 00 00	, MALE 10 18 18) (100 52 10) (1000		FEMALE 10 1	100	1000
AN INDINGS (CONTINUED) FILTRATION OF LEUCOCYTES		52 52 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 52 18 18 0	100 52 10) (000		10	100	1000
(CONTINUED) (NO.	 	200000000000000000000000000000000000000	18 (8)	10) (: : : : : :		52	52	7 7
NFILTRATION OF LEUCOCYTES	1 + + + + + + + + + + + + + + + + + + +	0 0 0 0	18		52)) (25) (19) (20) (52)
NFILTRATION OF LEUCOCYTES	1 + + + 1 + + + +	0 0 0 0	18						
	+ + + + + + + + + + + + + + + + + + + +	000	000	10	52	4.5	19	19	27
	+ + 1 + + + +	00	0 0	0	0	2	0	, -	ıς
	+ 1 + + +	0		0	0	0	0	0	0
	1 +		o o	0	0	0	0	0	0
MYOCARDITIS	+	67	18	10	50	52	19	20	52
	-	n (> c	> c	V C	> 0)	> c	> C
	+ + + + +	>	> C	> C	o c	> C	> C	o c	> C
	- - -	>	>	•	>	>	•	>	,
THICKENING OF ARTERIAL WALL	1	52	18	10	52	52	19	20	51
	+	0 (0	0 (0 (0 (0 (0 (₩.
٠	+ + + + +	00	00	00	00	00	00	00	00
THROMBOENDOCARDITIS	i	52	18	10	52	52	19	19	52
	+	0	0	0	0	0	0	~ 1	0
	+ :	0 (0 (0 (0 (0 0	0 0	0 0	0 0
	+ + +	၁	ວ	0	o	o	0	o	o.
THROMBOSIS	ı	52	17	10	52	52	19	20	52
	+ -	00	0 -	00	00	00	0 0	0 0	00
	+ +	o c	-1 -	> C	o c	o c	o c) C	o c

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 5

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED <u>IN EXTREMIS</u> OR ON SCHEDULE (TREATMENT PERIOD)

			-			`					STUDY	Y NO. 83004
	:::::::::::::::::::::::::::::::::::::	! ! !	! ! !	MALE	: : :	: 	! ! ! !	 	FEMALE	LE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		52	10	100	1000		52	10	100	1000	
THYMUS	(NO. EXAMINED) :	, ,) (67	15)(10)(50)	V) (67	19)(16)(52)	
ATROPHY	1 -	,	6.5	14	10	20		48	19	15	52	
	+ +		00	00	00)		00	00	٥ ب	o o	
	+ + + +		0	-	0	0		- 71	0	0	0	
MIGRATION OF HEMOSIDERIN-LAD	EN I	7	6.	14	10	20		67	19	16	52	
CELLS			0	₩.	0	0		0	0	0	0	
	++		0	0	0	0		0	0	0	0	
	++++		0	0	0	0		0	0	0	0	
					*							
HEMORRHAGE	ı	7	67	14	6	20		67	19	16	55	
	+		0	0	Ţ	0		0	0	0	0	
	+++		0	0	0	0		0	0	0	0	
	+++		0	1	0	0		0	0	0	0	
	·					*			** **			
HYPERPLASIA OF EPITHELIAL	i	ζ,	13	2	Ŋ	7		13	18	7	17	
RETICULUM CELLS	+	1.1	35	12	4	4.5		31	0	6	30	
	+++		-	₽	↤	1		Ŋ	ᠵᢇ	0	Ŋ	
	+ + + +		0	0	0	0		0	0	0	0	
				٠								
		1	1	1 1 1	1 1 1		1 1 1 1	1	1 1 1 1 1		1 1 1 1 1 1	

1) GRADE: -, NEGATIVE; +, SLIGHT; ++, MODERATE; +++, SEVERE. * P<0.05 *** P<0.001

13 - 6 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ON SCHEDULE	
N O	
OR	
IN EXTREMIS	00
N	ERI
KILLE	C TREATMENT F
DEAD,	(TRE
FOUND	
ANIMALS FOUND DEAD.	

	SEX :	1	1 1 1 1	MALE	! ! !	1	 	: : : : :		i	1 1 1 1 1 1	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		52	10	100	1000		52	10	100	1000	
LYMPH NODES (SUBMAXI.)	(NO. EXAMINED) :	\sim	51)(16)(10)(52)	V	48)(19)(19)(52)	
ANGIECTASIA	1 + + + + + + + + +		51000	90 00 0	10000	52 000 00		8 4 0 0 0	10 00 00	1900	51 0 0	
BLOOD ABSORPTION	+ + + + + +		51 0 0	79 00 00	0000	50 0 0		47 1 0	000	0000	51 0 0	
CYST	1 + + + + + + + +		0000	16 0 0	0000	S 0 0 0		8 0 0 0	6000	19 0 0	5 0 0 0	
INFILTRATION OF LEUCOCYTES	1, + + + + + + + + + + + + + + +		51 0 0	16 0 0	0000	0 0 0 11		8 7	19 0 0	000	52 0 0	
INFLAMMATION	+ + + + + +		0 0 0	* 4 C O O	000	ν 0 0 0		48 00 0	0 0 0 0	1 1 0 0	S S O O O	

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

TABLE 13 - 7

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED <u>IN EXTREMIS</u> OR ON SCHEDULE (TREATMENT PERIOD)

		! ! !	[] ! ! ! !	MALE	! ! ! ! ! !	1	} : : : : :	 	FEMALE			
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED	1	52	10	100	1000] 	52	10	100	1000	
(CONTINUED) LYMPH NODES (SUBMAXI.)	(NO. EXAMINED)		51)(16) (10)(52)	<u> </u>	78) (87	19)(19)(52)	
	. 13	_										
INCREASE OF PLASMA CELLS	1 +		51	16	10	52		ر د ح	18	18,	51	
	- + + + + + +		000	000	000	000		140	100	00	• 0 0	
				,								
LYMPHADENITIS	1 .		50	16	10	52		48	19	19	52	
	+ +		٥ ٦	00	00	00		00	00	00	00	
	+ + + +		0	0	0	0		0	0	0	0	
LYMPHOCYTIC HYPERPLASIA	1		51	16	10	5.2		9 7	19	19	52	
	+ + +		00	0 0	00	00		e e	00	o o	00	
	+ + +		0	0	0	0		0	0	0	0	
MIGRATION OF FOAMY CELLS	I		51	15	10	52		48	19	19	52	
	4+ 4		00	~ €	00	00		0 0	00	00	00	
	· + · + +		0 0		0	0 0		0	0	0	0	
			7	٧	·	Ç		7.7	0	0	5.2	
PROLIFERALION OF RELICULAR CELLS	ר ור א		0	0 0	0	, 0		0	0	0	, 0	
	+ +		0 (0 (0 0	00		~- ⟨	00	00	00	
	+++++		>	>	>	>		· >	Þ))	

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 8
CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS
ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE
(TREATMENT PERIOD)

		1		MALE			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		FEMAL			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN	LEVEL (PPM) : NO. NECROPSIED :	1 1 1 1 1 1	52	10	100	1000		52	10	100	1000 52	
LYMPH NODES (PULM.HILUS)		V	75)(12)(8)(8	45)	J	38) (12)(15)(36)	
	1)											
АТКОРНҮ	_ 1		75	12	8	4.5		37	12	15	36	
	+ + +		00	00	00	00		۰ 0	00	00	00	
	+++++		0	0	0	0		0	0	0	0	
BLOOD ABSORPTION	ţ		31	ω	9	23		15	* 5	* 4	14	
	+ +		٥ ٨	~ 0	~ 0	21		18 4	00	4 0	21	
	++++		0	~	0	0		↔	0	0	0	
INCREASE OF PLASMA CELLS	ı		42	11	ω	4.5		38	12	15	36	
	+ + +		00	40	00	00		00	00	00	00	
	++++		0	0	0	0		0	0	0	0	
PROLIFERATION OF RETICULAR CELLS			41	12	∞ 0	45		38	12 0	15	36	
	+ + +		100	000	000	00		00	00	00	00	
				•							1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

1) GRADE: -- NEGATIVE; + SLIGHT; ++ MODERATE; +++ SEVERE. * P<0.05 ** P<0.01

TABLE 13 - 9

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
O	
0 R	
EXTREMIS	(00)
N	PERI(
	TREATMENT R
DEAD	(TRE/
FOUND	
ANIMALS	

	SEX	 	! ! ! !	MALE	 	! ! !			FEMALE	ш		
ORGAU FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		52	10 110	100	1000		52	10	100	1000	
ENT.)	(NO. EXAMINED)	5	52)(15)(10)(52)	S	50) (19)(19)(51)	
ANGIECTASIA	1 + + + + . + . +	ιΛ	N O O O	14 0 1	10000	200 000		46 0 1 3	199	19	7	
BLOOD ABSORPTION	1 + + +	v	2000	14 1 0 0	1 0 0 0	N 0 0 0		0000	18 0 1	19 00 00	0 0 0	
CYST	1 + + + + + +	Ŋ	51 0 0	15 0 0	10 0 0	S S S S S S S S S S S S S S S S S S S		000	6 0 0 0	10 00 0	51 0 0	
EXTRAMEDULLARY HEMATOPOIESIS	1 + + + + + +	'n	52 0 0	15 0 0	0000	5 0 0 0 0		0000	0000	19 0 0	50 0 0	
HISTIOCYTOSIS	+ + + + + +	ľ	52 0 0	15	10 0 0	N 0 0 0		49 0 0	0 0 0	19 0 0	51 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 10

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

	ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)	OUND DEAD C TR	EATMENT	D IN EX PERIOD	TREMIS 0	R ON SC	HEDULE	u - 0	! ! ! ! ! !	STUDY	STUDY NO. 83004
ORGAN FIMDINGS	LEVEL (PPM) : NO. NECROPSIED :	5 2 5	10	100	1000		52	10	00	1000	
CONTINUED) LYMPH NODES (NESENT.)	(NO. EXAMINED): (1	52)(15)(10)(10)(52)	 	50) (19)(19)(19)(51)	1 1 1 1 1 1 1
PROLIFERATION OF RETICULAR CELLS	4R CELLS +++++++++++++++++++++++++++++++++++	52 000	15 0 0	0000	0 0 0 0		48 11 0	19 000 0	10 0 0 0 0	51 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 11

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF ME,THANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
N O	
OR	
IN EXTREMIS	(001
H	PER
KILLED	TREATMENT
DEAD,	(TRE
FOUND	
ANIMALS	

	X		 	MALE	1	1	! ! ! !	! ! !		E .	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1
ORGAN FIMDINGS	LEVEL (PPM) NO. NECROPSIED		52	10	100	1000	1	52	10	100	1000	; ; ;
SPLEEN	O. EXAMI		52)(18)() (6	52)	V	52)(19)(20) (52)	
	1	~										
АТВОРНУ	ı		20	18	٥	52		51	19	# 8 8	27	
	+		←1 ·	0	0	0		7	Ö	0	~ -	
	+ + + + +		0 1	00	00	00		00	00	~ ~	7 T	
TIVE OF HISPAN BO MOTTASTERS			c	α	0	2		7	0	0	c v	
CALCILICATION OF VASCOLAR) 1 2) C	` C	ر ا		٦ -	. 0) C) 1 C	
	. +		0	0	0	0		10	0	0	o 0	
	+ + + +		0	0	0	0		0	0	0	0	
			C	(Ó	(ć	ç	ć	, -	
CAPSULITS	1 -) (0 0	> <	V C		20	0 0	0 0	1,	
	- ++		10	0	0	0		0) (-1	0	1 0	
	+++		0	0	0	0		0	0	0	0	
						*						
CONGESTION	1		33	13	٥	40		50	18	50	48	
	+		13	М	0	12		7	0	0	1	
	++		n	0	0	0		(-1	-	0	7	
	+ + + +		М	. 2	0	0		0	0	0	2	
EN DROCEMENT OF FOLLOWER	ı		2	8	٥	7.		25	19	20	52	
5	+		ı C) C	. c	ı - -		. 0	0	0	0	
	• +) C) C) C	4 0		o C	· c		0.0	
	- + - + +		0	0	0	o 0		0	0	0	0	
	•		,		,	•			,			

1) GRADE: - / NEGATIVE; + / SLIGHT; ++ / MODERATE; +++ / SEVERE. * P<0.05

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TABLE 13 - 12

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

	! ! ! ! ! !																						
1	1000	52)		20	2 &	4	52	0	0	0	i t	25	> C	00	51	0 ,	. - (o		10	13	א כ	٦
1 1 1	100	20)(, 8 , 8 , 8	D 4	1	20	0	0	0	ļ	20	> (0	20	0 (o (0	*	13	0 1	า ~	‡
FEMALE	10	19)(14	7 7	2	19	0	0	0		19	o c	00	19	0	0	0	*	13	0 10	n r	า
•	52	52)(23	8 0	₽	52	0	0	0		25)	00	52	0	0	0		10	2 '	0 0	>
	1 1 1 1 1 1	V																					
1	1000	52)		25	7 7	2	51	н	0	0		51	э,	- 0	52	0	0	0		6	36	Λſ	V
	100) (6		ω,	- 2	, ,	٥	0	0	0		6 6	o (00	6	0	0	0	*		0 ())	o
MALE	10	18)(11	ν v	0	18	0	0	0		17	۰,	- 0	17	0	0	(-1	*	7	6	~ (၁
1	52	52)(50	50 2	0	52	0	0	0		51	←1 (00	51	0	0	₽		10	27	12	2 0
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		! !																					
SEX	EL (PPM) NECROPSIED	CNO. EXAMINED) :	1)	1	+ +	+ + +	1	+	++	+ + + + -		1	+	+ + +	I	+	++	++++		1	+	++	+ + + +
	N ND I NG S	CONTINUED)		EXTRAMEDULLARY HEMATOPOIESIS			A THE TRATTON					FIBROSIS			HEMORRHAGE					HEMOSIDEROSIS			

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05 ** P<0.01 *** P<0.001

TABLE 13 - 13

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

	: : : : : : : : : : : : : : : : : : :	1	 	MALE	1 1 1		! ! ! !	 	FEMALE	! ! !		1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	! ! !	52	10	100	1000		52	10	100	1000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
SPLEEN	(NO. EXAMINED) :		52)(18)() (6	52)	~	52) (19)(20) (52)	
NECROSIS	1 + + + + + + + + + +		51 0 1	18 0 0	0000	0 0 1 1 0		2000	1 0 0 0	0 0 0 0	S O O O	
PROLIFERATION OF RETICULAR CELLS	+ + + + + + + + + + + + + + + + + + + +		0 0 0	18 0 0	0000	0 0 6 7		52000	19 0 0	0000	11 0 0	
RUPTURE	1 + + + + + + + + + + + + + + + + + + +		51 0 1	18 0 0	0000	51 0 0		52 0 0 0	10 00 0	50	2000	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 14

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED <u>IN EXTREMIS</u> OR ON SCHEDULE (TREATMENT PERIOD)

. ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	1 1 1 1 1 1 1	SEX	: : :	! ! ! !	MALE	 	! ! ! ! ! ! !	! ! ! !	 	FEMALE	L E		
ORGAN FINDINGS	LEVEL (LEVEL (PPM) : NO. NECROPSIED :		52	10	100	1000	1 1 1 1 1 1 1 1	52	10	100	1000	
MARR	(NO. E)	EXAMINED) :	J	52)(15)() (6	52)	J	51)(19)(19)(52)	
ACTIVATION OF HEMATOPOIESIS		1 + + +		10 10 10 10	* 0 v v u	* W W 4 O	9 7 7 0		7 7 7 7 7	10 0 1 2 2 2	44 W W W	4040 4	
CONGESTION		1 + + + + + + +		N 0 0 0	15000	0000	5.2 0 0 0		51000	19 0 0	18 0 1	S 0 0 0	
ЕДЕМА		1 + + + + + + + +		N 0 0 0	15 0 0	0000	50 0 0 0		51000	000	18 0 0 0	52 0000	
FATTY MARROW		1 + + + + + + + +		0000	10 0 0	0000	5.0 0 0		51 0 0	1000	18 0 0 0	N 0 0 0	
MIGRATION OF HEMOSIDERIN-LADEN CELLS	DEN	1 + + + + + + + + +		52 0 0	15	0000	S S O O O O O O O O O O O O O O O O O O	 	00 40	19	19	21	

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. ** P<0.01

13 - 15 TABLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ON SCHEDULE	
N O	
O.R	
DEAD, KILLED IN EXTREMIS	(TREATMENT PERIOD)
FOUND	
ANIMALS	

	: : : : : : : : : : : : : : : : : : :		 	MALE	1 1 1 1 1 1 1 1	: : : : : : : :			FEMALE		! ! ! ! ! ! ! ! !	
N ND I NG S	VEL (PPM . NECROP	: ! !	52	10	100	1000		52	10	100	1000	: 1 1 1 1 1 2 1 1 1 1
CONTINUED) BONE MARROW	(NO. EXAMINED) :		52) (15)() (6	52)	J	51)(19)(19)(52)	
	1)											
HISTIOCYTOSIS	1 + +		22 0 0	2000	0000	ν 0 0 0		2000	0000	000	N O O C	
	++++		0	0	>	5		>	>	o	Þ	
INCREASE OF GRANULOCYTES	1 + + + + + + +		52 0 0	15 0 0	0000	S 0 0 0		50 1 0	19 0 0	1000 000	0 0 0 0	
OSTEOGENESIS	1 + + + + + + + + +		16 36 0	* 7 M O O	* 0 0 0 0 * *	19 1 0		51 0 0	10 00 00	19	52 000 0	
HYPOHEMATOPOIESIS	! + + + + + +		S 0 0 0	15000	0000	5.2 0 0		50 0 0	0 0 0	10 00 00	51 0 0	
PROLIFERATION OF RETICULAR	CELLS + + + + + + + + + + + + + + + + + +		2000	15 0 0 0	0000	0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1	7 0 0	19	188	7 7 7 8 8	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. *** P<0.001

13 - 16 TABLE

CHRONIC AND CARCINDGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

	SEX :		MALE	1 1 1 1		! ! ! !	1	FEMALE		
ORGAN	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000	2 5 0	0 10	100	10	0 2
	(NO. EXAMINED) : (52)(14)() (6	52)	<u>.</u>	51)(19)	(02)(J	52)
CALCIFICATION	1 + + + + + + + +	S 0 0 0	14 0 0	0000	82 000 000	0 0 0 0	0000	0000		4 <i>9</i> 3 0
CONGESTION	' + + +	25 0 0 0	14 0 0	* ∞ o ⊣ o	5.2 0 0 0	51	1 0 0 0 0	0000		51 0 0
ЕДЕМА	+ + + + + + +	52 0 0	17 0 0	0000	S 2 0 0 0	И	51 19 0 0 0 0	0000		51 1 0 0
FOREIGN BODY GRANULOMA	1 + + + + *+ .+	52000	77 0 0 0	0000	55 0 0 0	ιΛ	51 19 0 0 0 0	0000		51 0 0
GRANULATION	1 + + + + + + + +	51 0 0	14 0 0 0	0000	5.2 0 0 0	ις ! ! ! !	50 19 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	500000000000000000000000000000000000000	 	5.2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

19 0 0

0000

47 1 3

52000

9 7 7 0

52000

1 + + +

INFLAMMATION

INFILTRATION OF LEUCOCYTES

HYPERPLASIA OF MUCOSAL EPITHERIUM

HYPERSECRETION

(CONTINUED) NASAL CAVITY

ORGAN FINDINGS

HEMORRHAGE

13 - 17TABLE

4

CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

NO. 83004		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																	
STUDY		1000	52)		52	00	0	51) (1	0	52	0	0	0		15	30	~ (0
	L E	100	20) (50,	00	0	50	0	0	20	0	0	0		ιΛ I	۷ ،	∞ (0
	FEMALE	10	19)(19	0	0	19	0	0	19	0	0	0	* * *	16	۷ .	⊶ .	0
SCHEDULE	: 	5.2	51)(51	00	0	51	0	0	50	⊣	0	0		11	5 8	10	H
OR ON SC	: 		<u> </u>																
EMIS	! ! ! ! !	1000	52)		51	ч С	00	52	0	0	52	0	0	0		7	75	9	0
D IN EX	: ! ! !	100) (6		6	0 0	0	٥. ٥	0	0	٥	0	0	0		7	2	23	0
KILLE EATMENT	MALE	10	14)(14	0 0	00	14	0	0	14	0	0	0	* * *	6	S	0	0
FOUND DEAD, KILLED <u>IN EXTR</u> (TREATMENT PERIOD)	! ! ! !	52	52)(52	0 0	00	52	00	0	52	0	0	0		9	37	œ	₩
FOUN	 	1	~																
ANIMALS	SEX	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINED) :	1)	i	+ +	- + - + +	1 -	+ +	+ + + +	1	+	++	++++		l	+	+++	++++

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. *** P<0.001

. TABLE 13 - 18

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

	ANIMALS FOUND DEAD, KILLED IN EXIMENTS ON ON SCHEDOLE	OUND OFFIC	FATMENT	001030							
		-								STUD	STUDY NO. 83004
	SEX		MALE	! ! ! !	: : : : :	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	: : : :	FEMALE	П Ш I		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100 1000 52	1000		52	10	100	1000	1 1 1 1 1 1 1
CCONTINUED) NASAL CAVITY	(NO. EXAMINED) : ((52)(14)() (6	52)	v	51)(19)(20) (52)	
	1)										
OSTEOSCLEROSIS	1 + + + + + + + +	52 0 0 0	14 0 0	0000	5.2 0 0 0		49 0 2 0	19 0 0	0000	52 000 000	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 19

CHRÖNIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

	SEX:	1	 	MALE	! ! !		1		FEMALE	! ! ! ш		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10 1	00 1	000		52	1001	00	1000	
NGOPH	. EXA	52	52)(1	16)(10)(52)	V	51)(19)(20)(52)	
	1)											
CALCIFICATION OF VASCULAR WALL		52		9 (10	52		51	19	20.	50	
	+ +	00) 0	00	00		00	. 0	0	v 0	
	++++	0		0	0	0		0	0	0	0	
					*	ļ		i	* *	ć		
CYSTIC DILATATION OF GLAND	.1 +	35		13	10	39 13		51 0	16 3	00	γ Μ	
	+ +	0		10	0	0		0	0	0	0	
	+ + + +	0		0	0	0		0	0	0	0	
FOREIGN BODY GRANULOMA	ı	52		9	10	52		50	19	20	52	
	+	0		0	0	0		← (0 (0 (0 (
	+ + + + + +	00		00	00	00		00	00	00	00	
					*					ć	(
HEMORRHAGE	1 -	52		% (۰ ر	51		51	19	070	ν Ο	
	+ +	0			۰ ،) (0	0	0	0	
	++++	0		0	0	0		0	0	0	0	
					*				:			
HYPERSECRETION	1 -	52		90	۰ ۲	52		46	19	19	8 7	
	+ +	00		00	0 1	00		n ~	0	0	0	
	+ + +	0		0	0	0		0	0	0	0	
												11 11 11 11 11 11 11 11 11 11 11 11 11

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05 ** P<0.01

TABLE 13 - 20

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
Z O	
OR	
D IN	NT PERIOD)
KILLED	ATMENT
DEAD	(TREA
FOUND	
ANIMALS	

100 1000 0 10 100 1000 52 52 52 52 52 10) (52) (51) (19) (20) (52)
1 +
INFILTRATION OF LEUCOCYTES

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 21

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
NO	
0.8	
EXTREMIS	(00:
N	PERIO
Ω	TREATMENT !
DEAD	(TRE/
FOUND	
ANIMALS	

	SEX:	1 1 1 1 1 1 1	MALE		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	! ! ! !	! ! ! !	FEMALE		 	! ! ! ! ! ! ! ! ! ! ! !
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	5.2	10	100	1000	! ! ! ! ! !	52	10	100	1000	
TRACHEA	(NO. EXAMINED) :	(52)(16)(10)(52)	Ü	51)(19)(20) (52)	
CYSTIC DILATATION OF GLAND	1 + + +	9 9 9 0 0	1 0 0	1 0 0	51 0 0		51 0 0	19 0 0	000	52 0 0	
HYPERSECRETION	1 + + + + + +	52 0 0	16 0 0 0	10000	5 2 0 0 0		0 0 0 0 0	19 0 0	0000	S 0 0 0	
INFILTRATION OF LEUCOCYTES	1 + + + + + + + +	51 10 0	16 0 0 0	0000	0 0 0 0		7 7 7 0 0 0	19 0 0	0000	47 00 00	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

13 - 22TABLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
2 0	
O.R	
IN EXTREMIS	PERIOD)
KILLED	TREATMENT
DEAD,	(TRE
FOUND	
ANIMALS	

STUDY NO. 83004

	SEX:	1 1	 	MALE		!	1	İ	! 14.			
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	[52	10	100	1000	1 1 1 1 1 1 1 1	52	10	100	1000	
רחאפ	(NO. EXAMINED	V	52)(50)(52)(52)	V	52)(19)(20)(52)	
	1)											
ADENOMATOSIS	1 + + + + + + + +		8 7 0 0	49 0 0	47 4 1	7 7 7 7 8		49 2 1	17 1 0	19 0 0	51 0 0 0	
ALVEOLAR BRONCHITIS	1 + + +		51 0 0	0000	52 0 0 0	5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		S O O O	0 0 0	2000	5.2 0 0	
ALVEOLITIS			0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0000	. 20 10 0	5,000 000		25 0 0 0	0 0 0	0000	S 0 0 0	
ANEMIA	1 + + + + + + +		51 0 0	0000	52 0 0 0	15 0 0		55 0 0 0	0 0 0 0	0000	0 0 0 0	
CALCIFICATION OF VASCULAR WALL	WALL +++		12 40 0	. 44 10 0	7	6 K M O O		5 8 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	# \ 0 0 0 X X #	24 0000	2 6 2 6 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. ** P<0.01

TABLE 13 - 23

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

			MALE	1 1 1 1 1				FEMALE		
ORGAN FINDINGS	LEVEL (PPM) . : NO. NECROPSIED :	52	10	_	00	52	G W		100 1	1000
CCONTINUED (CONTINUED LUNG	(NO. EXAMINE	52) (20) (05	52) (520	\(\sqrt{1} \)	52) (19	19) (20) (52)
CONGESTIVE EDEMA	1 + + + + + +	8 0 0 0	6 0 0 T	5 0 0 0	21 0 0 0	50 0 1	1000		19 0 1	5 S 0 0 0
CORGESTION	1 + + + + + + + + +	50 00 00	48 11 0	49 17 0	5 2 0 0 0	51 0 0	1 19 0 0 0 0 1 0		0000	7 1 1 7 0
EDEMA	' + + + + + +	8 0 0 0 0	0000	2000	. 21	52 0 0	119		2000	S 2 0 0 0
EMPHYSEMA	-	8 0 0 0	0000	N 0 0 0	25 0 0 0	52 0 0	7000		2000	51 1 0 0
EXTRAMEDULLARY HEMATOPOIESIS	SIS	N O O O	6 7 0 0 0	2000	N O O O	. 0 0 0	19		0000	5.2 0 0 0

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

13 - 24 TABLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

		; ; ; ;	MALE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		 	! ! ! !	FEMALE	ш		!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
ORGAN FINDINGS	ED :	0 52	10	100	1000 52		52	10	000	1000	
CCONTINUED)	CNO. EXAMINED) : C	52) (50) (52)(52)	· · ·	52) (19)(20)(52)	
	1)										
GRANULATION	1 + +	52	000	52	S 0 0		5200	19 0	20,0	51 1 0	
	+ + + + + + + + + + + + + + + + + + + +	0	0	0	0		0	0	0	C	
GRANULOMATOUS PNEUMONIA	1	51	20	52	52		52	19	20	5.2	
	+ +	00	00	00	00		00	00	00	00	
	+ + +	• ←	0	0	0		0	0	0	0	
HEMORRHAGE	1	50	47	20	67		27	16	17	51	
	+	~	М	←,	01		v c	m c	m c	~- ○	
	+ + + + + +	00	00	0 1	90		00	00	00	00	
		,	ļ		c t		1	* (7	,	
HISTIOCYTOSIS	I +	25 20	0 0	20	7 0		28 13) (10	T CT	
	- + + - ·	0	0	10	0		0	0	0	0	
	++++	0	0	0	0		←	0	0	0	
				C L	,		ř	* c	* 0		
INFILTRATION OF LEUCOCYTES	1 +	5,7	0 0	2 S 0			17	۲ O	1	11	
	++	0	0	0 (0 (~ 0	00	00	00	
	++++	0	0	0	၁		>	>	>	o	
						1	1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05 ** P<0.01

TABLE 13 - 25

 $a_j^{p_{i_j}}$

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

	X II X II X II II II II II II II II II I		! ! ! ! ! ! ! ! ! !	MALE			i [i i i i		FEMALE	і і І і І і І і		; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		5 2	10	100	1000		52		100	0 0	
(CONTINUED)	(NO. EXAMINED)	~ ::	52)(20) (05	52)(52)	<u> </u>	52)(19)(20) (52)	
MIGRATION OF MACROPHAGE IN ALVEOLI	ALVEOLI - + + + + + + + + + + + + + + + + + +		52 000 000	49 0 1	S 0 0 0	5 0 0 0		S 0 0 0	1000	0 0 0	v 0 0 1 1	
WECROSIS	1 + + + + + + + + +		2000	4	52 0 0 0	52 0 0 0		S 2 0 0	19 0 0	0000	V 0 0 0	
OSSEOUS TISSUE	' + + + + + +		51 0 0 0	47 3 0	200	0 0 0		4,8 0 0	18 1 0	0000	47 5 0 0	
PLEURISY	+ + + + + +		0 0 0 1	0000	52000	52 0 0 0		51 0 0	14 0 0	0000	0 0 0	
SWELLING OF ALVEOLAR EPITHELIUM	- + + + + + + + + + + + + + + + + + + +		6 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	78 0 0 0	N 0 11 0	51 0 0		N 0 0 0	1 0 0 0	000	N 0 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 26

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
Z O	
OR	
IN EXTREMIS	0
DEAD, KILLED	TMENT
DEAD,	/ TRE/
FOUND	
ANIMALS	

	SEX :		MALE	1 1 1 1 1	! ! ! ! !	1 1 1 1		FEMALE		! ! ! ! ! ! !	
ORGAN FINDIN	·~ o	52	10 10	100	1000	! ! !	52	10	100	1000	
(CONTINUED)	(NO. EXAMINED) : (52) (> (05	52)(52)		52) (19)(20) (52)	1 1 1 1 1 1 1 1 1 1 1 1
	1)										
THROMBOSIS	1 +	52 0	67.	52 0	52 0		52 0	19	20,	52 0	
	+ + + + + + + + +	00	0 1	o o,	00		00	00	00	00	
VASCULITIS	1 +	51	50	52	52 0		52	19	20	52	
	+ + + + +	0 11		00	000		00	000	000	000	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 27

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
NO	
OR	
TREMIS	
Z	FRI
KILLED	TREATMENT PERIOL
DEAD.	TAPE
FOUND DEAD	
ANIMALS	

	SEX :		MALE					FEMALE	ш		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000	1 1 1	52	10 100 1000 52 52 52	100	1000	
ORAL CAVITY	(NO. EXAMINED) : C) (0) (0	1) ((0	<u> </u>) (0) (0	1) (6	
	1)										
PYOGENIC STOMATITIS	1 +	00	00	1 0	00		00	00	0 0	00	
	+ + + + +	000	000	00	00		00	00	1 0	00	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 28

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

	SEX :		MALE					FEMALE		1	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	1	1000	! ! !	52	10	•	1000	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !
ESOPHAGUS	(NO. EXAMINED) : (52) (15)(10)(Į.	~) (05	18)(18)(52)	
	1)										
HYPERKERATOSIS	1 + + + + + + + +	52 0 0 0	10 00 0	10000	S 2 0 0		4 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	18 0 0 0	8°000.	21 0 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

13 - 29 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

		S E X	1 1 1	! ! ! !	MALE	: : : : :	 	 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FEMALE		1	
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED	SIED:		0 52	10	100	1000	! ! ! ! ! ! ! !	52	10	100	1000	
	(NO. EXAMINED)	NED) :	J	52) (15)(10)(51)	V	51)(18)(18)(50)	
CYST		1 + + + + + +		5.2 0 0	15 0 0	10 00 0	51 0 0		50	18 0 0 0	18 0 0 0	0000	
DILATATION OF GASTRIC FAVEOLAE	OLAE	1 + + + + + + + +		5.2 0 0	15000	* & U O O	51 0 0		48 0 0 0	18	18 0 0	, to 0	
ЕДЕМА		1 + + + + + + +		5.2 0 0	12 × 0 × 1 × ×	10 00 0	1000		51 0 0	8 0 0 0	18 000	6 7 0 0 0	
EROSION		1 + + + + + + +		51 0 0	15000	0000	51 0 0		51 0 0	18 0 0 0	8000 000	49 0 1	
HEMORRHAGE		1 + + + + + + + +		50 000	15000	10 0 0	510000		0 0 0 0	18 000	7 0 0 0 0	0000	:

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. ** P<0.01

13 - 30 TABLE

- 1 m

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ON SCHEDULE	
N O	
OR	
IN EXTREMIS	00)
N	PER10
KILLED	TREATMENT P
DEAD	(TRE
FOUND	
ANIMALS	

ORGAN FINDINGS (CONTINUED) (CONTINUED) (NO. E HYPERPLASIA OF FORESTOMACH MUCOSAL	LEVEL (PPM) : NO. NECROPSIED : (NO. EXAMINED) : 1) 1)	52	MALE 10		! ! ! ! !	 		FEMALE			
FINDINGS (CONTINUED) TOMACH HYPERPLASIA OF FORESTOMACH P	CROPSI CROPSI XAMINE	1	10							1000	
CONTINUED) TOMACH HYPERPLASIA OF FORESTOMACH M	X X X X X X X X X X X X X X X X X X X	! ! !	7	100	1000		52	10	100	52	
0 6			(15)(10)(51)		51)(18)(18)(20)	
0 6											
0 F											
100	+ + -	51	14	10	51		51	18	18	20	
	-	⊣ O	- O	0	0		0	0	0	0	
	+ +	0	0	0	0		0	0	0	0	
HYPERKERATOSIS OF FORESTOMACH		52	14	10	51		51	18	18	20	
	+	0	7	0	0		0	0	0 (0 (
	++	0	0	0	0		0	0	0	0	
	++++	0	0	0	0		0	0	0	0	
			•								
INFILTRATION OF LEUCOCYTES		52	15	10	50		67	18	18	4 % C	
	+ +		o c	> C	- C		v C	o c	o c	y C	
	· + · + +	0	00	0	0		0	0	0	0	
20 FT < 20 M ×	1	r, C	ر د	0	Ċ		5.	8	8	20	
LATERITALION	+	,	3 0	, c) -		H C	0	0	0	
	+	0	0	0	0		0	0	0	0	
	+ + + +	0	0	0	0		0	0	0	0	
			*								
ULCER	ı	51	13	10	51		20	18	17	20	
	+	7	(~1	0	0		0	0	0	0	
	++	0	₽	0	0		H	0	0	0	
	+ + +	0	0	0	0		0	0	~	0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

TABLE 13 - 31

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

OR ON SCHEDULE	
NO	
OR	
EXTREMIS	(001
I	PERI
KILLED	TREATMENT
DEAD, K	F ∪
FOUND	
ANIMALS	

	SEX :		MALE					FEMALE	ш		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000	I I I I I I I I I I I I I I I I I I I	52	10	100	1000	
ILEUM	(NO. EXAMINED) : (52)(15)(9 (9	51)	J	78)(18)(17)((8)	
	1)										
INFLAMMATION	ī	52	15	9	51		24	18	17	78	
	+	0	0	0	0		0	0	0	0	
	++	0	0	0	0		0	0	0	0	
	++++	0	0	0	0		₽	0	0	0	
SEROSITIS	1	52	15	9	51		48	18	16	8 7	
	+	0	0	0	0		0	0	7	0	
	++	0	0	0	0		0	0	0	0	
	+ + + +	0	0	0	0		0	0	0	0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 32

 $\mathcal{I}_{\mathcal{F}}^{\mathcal{F}}$

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

OR ON SCHEDULE	
TREMIS	PFRIOD)
DEAD, KILLED	
ANIMALS FOUND	

	SEX :		MALE					FEMALE	щ		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000		52	10 52	100	1000	
СЕСИМ	EXAMINE	52) (15)() (2	51)	\sim	78) (18)(17)((67	
GRANULATION	1 + + + + + +	S 0 0 0	15000	~ 0 0 0	51 0 0		47 1 0 0	78 000 000	17. 0 0	¢ 0 0 0	
HEMORRHAGE	1 + + + + + +	S 0 0 0	1000	V 0 0 0	51 0 0		8 0 0 0	0 0 0 0	17 0 0	48 0 0	

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 33

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

STUDY NO. 83004

	SEX :		MALE					FEMALE	щ		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000		52	10	100	1000	
СТИМ	(NO. EX	52)(15)(8) (8	51)	Ü) (67	18)(17)((67	
HEMORRHAGE	1 + + + + + +	0000 8	15 0 0	8000	51		67	18 000	17 0 0	48 0 0 0	
SEROSITIS	1 + + + + + + + +	52 0 0 0	15 0 0	8000	51 0 0		6 0 0 0	118 0 0 0	17 0 0	48 0 1	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 34

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

1			!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 2	1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
R CELLS R C		. XUO	1	MALE	1	1		F	ALE	1	
R CELLS	N I N D I N G S	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000	52	10	100		
ELLS	XILLARY GLANDS	••			10)(52)			19)(52)	
COCYTES - 52 16 10 52 50 60 60 60 60 60 60 60 60 60 60 60 60 60		1)									
COCYTES - 52 16 10 52 51 + + + 0 0 0 0 0 1 1 10 52 51 + + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 + + + 0 0 0 0 0 1 + + 0 0 0 0 0 1 + + 0 0 0 0 0 1 + + 0 0 0 0 0 1 + + 0 0 0 0 0 1 + + 0 0 0 0 0 1 + + 0 0 0 0 0 1 + + 0 0 0 0 0 1 + + 0 0 0 0 0 1 + 0 0 0 0 1 + 0 0 0 0 1 + 0 0 0 0 1 + 0 0 0 0 1 + 0 0 0 0 1 +	ROPHY OF ACINAR CELLS	1 +	52	16	10	5.2 0	\$0 0	19	19	52 0	
COCYTES - 52 16 10 52 51 + + 0 0 0 0 0 0 0 0 0 0 0 0 0 1 10 52 51 - 52 16 10 52 50 - 52 16 10 52 50 - 7 52 16 10 52 50 - 7 52 16 10 52 50 - 7 52 16 10 52 74 - 7 52 16 10 52 74 - 7 52 16 10 52 74 - 7 52 15 10 52 51 - 7 52 15 10 52 51 - 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		+ + + + +	00	00	00	00	100	00	00	00	
COCYTES - 52 16 10 52 50 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	BROSIS	1	52	16	10	52	51	19	19	51	
COCYTES - 52 16 10 52 50 11 1		+ +	00	00	00	00	00	00	00	T 0	
COCYTES - 52 16 10 52 50 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		· + · + +) O) O) O	, 0) O	0	0) O	
COCYTES - 52 16 10 52 48	ANULATION		55	16	10	52	50	19	19	5.2	
COCYTES		+ +	0 0	00	00	0 0	← (00	00	0 0	
COCYTES - 52 16 10 52 48		+ + + + +	00	00	00	00	00	00	0	00	
+ + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ILTRATION OF LEUCOCYTES		52	16	10	52	8 7	19	19	51	
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+ +	00	o c	00	00	m O	00	00	- 0	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		+++++	0		0	0	0	0	0	0	
	SENERATIVE CHANGE	ı	52	15	10	52	51	19	19	52	
		+ + -	000	- 0 0	000	000	000	000	000	000	
		+ + +	>	>	>)	o ·	>)	>	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 35

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

! ! !	1000	52)		52	0	0	51	Ţ	0	0	52	0	0	0	52	0	0	0	20	2	0	0	! ! ! !
LE	100	19)(19	00	0	19	0	0	0	19	0	0	0	19	0	0	0	18	Н	0	0	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
FEMALE	10	18)(18	0	0	18	0	0	0	18	0	0	0	18	0	0	0	18	0	0	0]
1	52	51)(20	0	7	51	0	0	0	20	-1	0	0	20	0	ÇΤ	0	25	7	0	0	! ! ! ! !
1	1 1	~																					! ! ! !
1	1000	52)		52	0	0	52	0	0	0	52	0	0	0	52	0	0	0	20	2	0	0	1 1 1 1
	100	10)(10	00	0	10	0	0	0	10	0	0	0	10	0	0	0	10	0	0	0	
MALE	10	16)(16	0	0	16	0	0	0	16	0	0	0	16	0	0	0	16	0	0	0	1
	52	52)(52	00	0	52	0	0	0	52	0	0	0	52	0	0	0	9 7	9	0	0	
SEX :	LEVEL (PPM) : NO. NECROPSIED :	XAMINED	1)	1 -	+ +	+ + +		+	+++	++++	i	+	+++	+ + +	ı	+	++	+++	ı	+	+++	+++	
	ORGAN FINDINGS NO. N	AL GLANDS		ATROPHY OF ACINAR CELLS			DILATATION OF DUCT				FIBROSIS				HYPERPLASIA OF DUCTAL EPITHELIUM				INFILTRATION OF LEUCOCYTES				

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 36

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

STUDY NO. 83004

SEX	SEX .	 	MALE	 	 	 	 	FEMALE	! ! ! ! ! ! !	 	
ORGAN FIND	LEVEL (PPM NO. NECROP	52	10	100	1000	1 1 1	52	10	100	1000	
(CONTINUED) SUBLINGUAL GLANDS	(NO. EXAMINED) :		16)(10)(52)	· ·	51)(18)(19)(52)	1
	1)										
PROLIFERATION OF DUCT	1	52	16	10	51		51	18	19	52	
	+ -	00	0 0	00	←1 (00	00	00	00	
	+ + + + + +	0	00	00	00		00	00	00	00	
REGENERATIVE CHANGE	,	52	15	10	52		51	18	19	52	
	+	0	J	0	0		0	0	0	0	
	+++	0	0	0	0		0	0	0	0	
	+ + +	0	0	0	0		0	0	0	0	
		 	 	1] 	1	1	1	!		

13 - 37TABLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

LEVEL (PPM) : 0 10 NO. NECROPSIED : 52 52 (NO. EXAMINED) : (52) (16) (+++ 0 0 0				~ Х П	AIMEN	ikealmeni Pekiou						STUDY	Y NO. 83004
ORGANIA LEVEL (PPM) : 0.0 10.0	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	! ! ! ! ! ! ! ! ! ! ! !	1 1 1 1	 	MALE	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FEMAL	і і і і ш	1 1	1 1 1 1 1 1 1 1 1 1
ACINAR CELLS	ORGAN FINDINGS	1	! ! ! ! ! ! ! !	52	10 52	100	1000		52	10	100	1000	1 1 1 1 1 1 1 1 1
COCYTES - 52 16 10 52 50 18 19 19 19 19 19 19 19 19 19 19 19 19 19	PAROTID GLANDS	(NO. EXAMINED) :	V	52)(16)(10)(52)	J	51)(18)(19)(52)	
DF + 52 16 10 52 51 18 19 19 19 19 19 19 19 19 19 19 19 19 19		1)											
PELLS													
OF + + + + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ATROPHY OF ACINAR CELLS	1		52	16	10	52		20	18	19	5,1	
OF - 52 16 9 52 51 18 19 19 19 19 19 19 19 19 19 19 19 19 19		+ +		o c	o c	o c	o c		- C	o c	o c	- C	
COCYTES - 52 16 9 52 51 18 19 19 19 19 19 19 19 19 19 19 19 19 19		+ + +		0		0	0		0	0	0	0	
OF - 52 16 9 52 61 18 19 19 19 19 19 19 19 19 19 19 19 19 19						¥							
COCYTES - 52 16 10 52 49 18 19 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		ı		52	16	6	52		51	18	19	52	
COCYTES - 52 16 10 52 49 18 19 +++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ACINI	+		0	0	0	0		0	0	0	0	
COCYTES - 52 16 10 52 49 18 19 +++ 0 0 0 0 0 0 1 1 0 0 0 0 0 0 0 0 0 0		+++		0	0	7	0		0	0	0	0	
COCYTES - 52 16 10 52 49 18 19 19 19 19 19 19 19 19 19 19 19 19 19		++++		0	0	0	0		0	0	0	0	
COCYTES - 52 16 10 52 49 18 19 19 19 19 19 19 19 19 19 19 19 19 19													
COCYTES - 50 16 10 52 44 18 18 19 + + + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DILATATION OF DUCT	1		52	16	10	52		67	18	19	52	
COCYTES - 50 16 10 52 44 18 18 18 19 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+		0	0	0	0		← ,	0 (0 (0 (
COCYTES - 50 16 10 52 44 18 18 18 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1		+++		0	0	0	0 (, ,)))	
COCYTES - 50 16 10 52 44 18 18 18 14		++++		0	၁	၁	ɔ		o	5	>	>	
COCYTES - 50 16 10 52 44 18 18 18 18 14												į	
+ + + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	INFILTRATION OF LEUCOCYTES	ı		20	16	10	25		4 4		18	<i>)</i>	
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+ :		~ 0	0 0))		~ 0	>	٦ ,	n c	
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		++		0	0	o	0 ')))	> (
+ 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+ + + +		0	0	0	0		0	0	0	0	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$					•					*	*	*	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	REGENERATIVE CHANGE	I		52	16	10	52		38	18	19	27	
		+		0	0	0	0		12	0	0	Ŋ.	
		+++		0	0	0	0		~	0	0	0	
		+ + + +		0	0	0	0		0	0	0	0	

1) GRADE : - / NEGATIVE; + / SLIGHT; ++ / MODERATE; +++ / SEVERE. * P<0.05

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

	: X = S	 	MALE	1			 	EMA	LE	! ! ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS		52	10	100	1000	: 1 1	52	10	100	1000	
CCONTINUED) PAROTID GLANDS	(NO. EXAMINED) :	52) (16)(10)(52)		51)(18)(18)(19)(52)	1 1 1 1 1 1 1 1 1 1 1 1
	1)										
VACUOLAR DEGENERATION	1	52	16	10	52		50	18	18	52	
	+ ++	00	00	00	00		٥ ب	00	٥ ٢٠	00	
	+ + + +	0	0	0	0		0	0	0	0	
							1	1	1		
 	+ , SLIGHT; ++ ,	MODERATE; +++ , SEVERE	++ SE	VERE.							

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

STUDY NO. 83004

		1 1 1 1	1 1 1 1 1 1 1	. !	1 1 1 1 1 1 1	1 1 1 1	1	1 1 1 1	; ; ; ;	0 1	
	SEX :	٠	MALE					FEMALE	m		
	VEL (PPM) . NECROPSIE	52	10	100	1000	1	52	10	100	1000	 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1	(NO. EXAMINED) : (52) (17) (10)(52)	Ŭ	51)(19)(19)(52)	
	1)										
	1 +	52	16 0	10	5.0 0.0		51	19	19 0	5.2 0	
	+ + + + +	00	40	00	00		00	00	00	00	
ANG I E C T A S I A	+ + + + + +	4,7 4,1 0	17 0 0 0	0000	4 0 0 1 0		8 K O O	18 10 0	19 0 0	8 2 2 0	
BILE THROMBI	1 + + + + + + +	S 0 0 0	177	1000	17 0 0		51 0 0	1000	70 00 00	52 000 000	
CAPSULITIS	1 + + + + + + + +	52 0 0	17 0 0	10 0 0	52 0 0 0		51 0 0	19 0 0	19 0 0	5100	
CHOLANGIOFIBROSIS	+ + + + + +	7 7 0 0	1 0 0	8400	11000		7 6 0 0 0 0 0	* 6 0 0 0	77 0 0 0	4 W Q O O	

1) GRADE : - . NEGATIVE; + . SLIGHT; ++ . MODERATE; +++ . SEVERE. * P<0.05

TABLE 13 - 40

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN <u>EXTREMIS</u> OR ON SCHEDULE (TREATMENT PERIOD)

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		 		MALE			1 1 1 1		l m	İ	; ; ; ; ; ;	
	LEVEL (PPM) NO. NECROPSIED		52	10	100	1000	! ! !	52	10	100	1000	
t	(NO.		52) (17) (10)(52)	 	51)(19)(19)(52)	1 1 1 1 1 1 1 1 1 1 1 1
		1)										
CONGESTION	1 + + + + + + + +	1 + + +	25 000 000	16 0 1	0000	0 1 0 0 1		50 0 0	18 0 0	18 0 0	0 0 0 0	
CYST	1 + + + + + + + +	!	5.2000	17 0 0	10 000	2 0 0 0 0 0 0		50 1000	19 0 0	0000	0 0 0 0	
EXTRAMEDULLARY HEMATOPOIESIS	. + ‡	1 + + +	2000	17 0 0	8 2 0 0	0 1 1 0		7	17 2 0 0	19 0 0	0 × 7 × 7	
FATTY DEGENERATION OF HEPATIC	CELLS	1 + + +	32 10 2	7 7 7 7 .	7 10 0	32 111 6		25 2 2 2	133	7 7 7 7	24 24 1	
FIBROSIS	+ + + + + +	1 + + +	51 0 1	177 0 0 0	10 0 0	10001		0 0 0	19 0 0	6000	N 1 1 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

STUDY NO. 83004

1											
i		1									
1		!									
1		 									
1											
1			<u>.</u>		10 N O	^		0.000	01000	4400	
:		00	52)		16 27 9	0	51 0 0	50	82 0 0 0	5100	
1			Ö								
1	ш		19)(* U, 4 0	0	19 0 0	19 0 0	19 0 0	17 2 0 0	
1	FEMALE		J								
1	ш	10	19)(* 9 2 7	0	000	000	7 0 0 0	000	
!											
1		201	51)(18 30 3	0	51000	51 0 0	51000	7 0 0	
)									
1		i i	V								
1		1 1									
1		! !	2)		0 01 0	_	m + 0 0	21.0.0.0		21.0.0.0	
!		1000	52		30	O	48 0 0	52 0 0	51 0 0	52 0 0	
1		[V								
i		100	10)(* 0 0 0	0	0000	1000	0000	1000	
1	ш	1									
1	MALE	10	17) (11 50	₽	16 0 0	17 0 0	16 0 10	17 0 0	
1		1	! ! !					•			
		52	52)(25 29 0	4	7 7 7 0	25000	2000	510000000000000000000000000000000000000	
		1	C1 		10.10		7	01	01		
1											
1	 . ×			1)	1 + +	+ + +	I + + + + + +	1 + + + + +	1 + + + + + + +	1 + + + + + + + +	
i) SIE	N E D			+	+	. +	+	+	
1	 	PPM ROP	AM I								
	 	NEC	I Х I								
		LEVEL (PPM) NO. NECROPSIED	(NO. EXAMINED)		S				z		
	! ! !				HEPATIC CELLS				LADI		
	! !		! !		IC				N N		
	 		1 1 1		PAT			N O	DER		
	! !		1 1 1					ATI	ISOI		
	! !		ED)		, 0 F			N E B	H E		
	! ! !		UNIL		ЭРНΥ		z O) E G E	0 5	ш	
	! !	S 9 N	(CONTINUED)		A T R (ATI	A R	NOI	HAG	
	1	GAN FINDINGS	1		FOCAL ATROPHY		GRANULATION	GRANULAR DEGENERATION	MIGRATION OF HEMOSIDERIN-LADEN CELLS	HEMORRHAGE	
	! !	ORGAN FIN	1		FOC		GRA	GRA	MIG	E H	
	1 1	0	LIVER								

TABLE 13 - 42

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED <u>IN EXTREMIS</u> OR ON SCHEDULE (TREATMENT PERIOD)

10 100 1000		SEX		MALE	! !				FEMALE			
HYPERPLASTIC NODULE - 46 15 99 45 49 18 18 18 18 14 10 10 10 10 10 10 10 10 10 10 10 10 10	ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10 10 52	100	1000		1 1	10 52	100 52	1000	
- 46 15 9 45 49 18 18 18 18 +++ 5 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CCONTINUED (CONTINUED	(NO. EXAMINED) : (52)	! ! !	! ! !	52)	Ü	51)(19) (19)(52)	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		1)										
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	HYPERPLASTIC NODULE	1 + +	46 25	15	640	45		670	180 0	10 0 10	9 M M 0	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		+ + +	0	>	5	0		0	>	5	>	
+ 44 0 2 34 21 0 1 +++ 1 0<	INFILTRATION OF LEUCOCYTES	ı	7	* * * 1 7	*	1 * 8		56	** 19	15	33	
IS ************************************		+ :	77	0 0	∾ (34		21	00	ν.	19	
S		+ + + + +	H 0	00	00	00		4 0	00	, 0	0	
IS				*	*				*		*	
N OF BILE DUCT + + 0 0 0 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	FOCAL NECROSIS	1	52	15	ω .	67		67	16	18	43	
N OF BILE DUCT - 52 17 10 52 50 19 19 19 19 19 19 19 19 19 19 19 19 19		+ -	0 0	0 °	∾ ⊂	~ ⊂		N C	⊣ へ	c	0 M	
N OF BILE DUCT - 52 17 10 52 50 19 19 19 19 19 19 19 19 19 19 19 19 19		+ + + + + + + + + + + + + + + + + + + +	00	v 0	00) (1		00	0 1	0	0	
N OF BILE DUCT - 52 17 19 52 50 17 17 17 17 17 17 17 17 17 17 17 17 17			(,	4	ć		Ċ	6	0	7	
BILE DUCT - 43 12 6 44 45 18 17 + 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PIGMENTATION	1 4	ν ν	` '	3 C	V C) (٥,	۲, O	7 -	
BILE DUCT - 43 12 6 44 45 18 17 ++ 6 1 2 5 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		+ +	0	0	0	0		• 0	0	0	0	
BILE DUCT - 43 12 6 44 45 18 17 + 6 1 2 5 6 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0 0		++++	0	0	0	0		0	0	0	0	
BILE DUCT - 43 12 6 44 45 18 17 1 1 2 18 17 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 17 18 18 18 18 18 18 18 18 18 18 18 18 18				•								
6 1 2 5 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	BILE		43	12	9 (77		4.5	18	17	77	
1 1 0 0 0 0 0 0		+ ++	9 2	N 1	~ ~	nΩ		00	- 0		00	
		++++	7	₽	0	0		0	0	0	0	

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05 ** P<0.01 *** P<0.001

13 - 43TABLE

CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

PROLIFERATION OF KUPFFER CELLS CONTINUED CONTINU	00 00 00 00 00 00 00 00 00 00 00 00 00	6 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	* 1 2 0 0 0 0 0 0 0 0 0	1
CCONTINUED) (CONTINUED) (NO. EXAMINED): (52)(17)(1 OLIFERATION OF BILE DUCT +++ 14 4 4 +++ 22 17 1 OLIFERATION OF KUPFER CELLS +++ 0 0 0		7 7 7 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	* 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1
#BILE DUCT	* % T T D O O O O O O O O O O O O O O O O O	49 2 0 0 0 0 0 1	* 000 0000	4 00 NOOO K
BILE DUCT - 13 8 8 +	**************************************	6 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	* 000 0000	8 4 0 0 0 0 K
BILE DUCT - 13 8 ++ 23 5 ++ 14 4 +++ 2 0 ++ 0 0 +		49 00 00 10 00 1	* 0000 *	8 4 0 0 0 6
KUPFFER CELLS	11.1 0000 011.1 2000 0	N 0 0 0 H	* 000 000	400 NOOO K
OF KUPFFER CELLS - 52 17 1 ++ 0 0 +++ 0 0 +++ 0 0 +++ 0 15 ***	70 000 0	N 0 0 0 H	* 0000 *	00 00 0 °
OF KUPFFER CELLS - 52 17 1 + 0 0 0 +++ 0 0 0 ++++ 0 0 0 0 0 0 0	0000 8200	N 0 0 11	* * *	N 0 0 6
OF KUPFFER CELLS	000	0004	*	, 000 k
GRANULOMA + 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		D O 4	*	, ,
GRANULOMA + + 22 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		D 41	*	, OC
GRANULOMA +++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		,⊶	* > *	O M
# 6RANULOMA - 27 1 + 22 + 22			*	۲
GRANULOMA - 27 1 + 22				7 7
22		12	13 13	7 7
1		31		28
1		ω		11
		0		0
51 16	<u>ب</u>	51	7	51
+ +		0	0	, , ,
4 0		0 0		0
000	00	0	0	0
52 16 1	Ŋ	51	4	52
0 0 +	0 0	0	0 0	0
.0		0		0
0		0		c

13 - 44 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

	ANIMALS FO	UND DEAD	/ KILLE FATMFNT	D IN EX	IMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE	S ON SC	HEDULE					
		,								STI	STUDY NO. 83004	
	SEX :	! ! ! ! ! !	MALE	[]] []	 	 	! ! ! ! !	FEMALE		 	1 1 1 1 1 1 1 1	1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	i i	1000		52	10	100	1000		
(CONTINUED)	(NO. EXAMINED) : (1	52)(17)(10)(52)	10)(52)	~	51)(19)((51)(19)(19)(52)	·	
	1)											
THICKENING OF CAPSULE	1 +	52	17	10	52		50	19	19	52		
	· + + + + +	000	000	000	000		.00	000	000	000		

LIVER

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. ** P<0.01

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* 6000

18 * 0 0 0

30 18 0

0000

0000

22000

+ + + + +

MACROPHAGE MIGRATION IN PERIVASCULAR AREA

13 - 45 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

) - 	
	1 1 1 1 1 1 1 1 1	SEX :			MALE		l	ı		FEMALE			
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED	SIED	25	5 0 0	10 1	52	0000	1 1 1 1 1 1 1 1	52	10	100	1000	! ! ! ! ! ! ! ! !
	(NO. EXAM	4ED.) : 0	ī,	52)(15)(8)(52)	J) (67	18)(17)(51)	
		1)											
ATROPHY OF PANCREATIC ACINUS	S	t	2	10	v	* œ	28		38	15	17 *	3.5	
		+ :	18	m c	91	0 0	14		~ ′	∾ -	· o c	12	
		+ + + + +		N 0	n 0	00	0 %		t 0	4 0	0 0	t O	
DILATATION OF DUCT		t	Ŋ	7	15	œ	52		67	18	17	51	
		+		1	0	0	0		0	0	0	0	
		+++	0	0	0	0	0		0	0	0	0	
		+ + +	_	0	0	0	0		0	0	0	0	
DECREASE OF ZYMOGEN GRANULES	S	ı	2	2	15	8	52		67	18	16	51	
		+		0	0	0	0		0	0	0	0	
		++		0	0	0	0		0	0	~	0	
		++++		0	0	0	0		0	0	0	0	
EN APCEMENT OF LANGERHANS!	TSI AND	ı	2	CV.	15	∞	52		67	18	17	20	
		+		0	0	0	0		0	0	0	← (
		++		0	0	0	0		0	0 (0 (0 (
		+ + +				0	0		0	0	0	၁	
TARTITRATION		i	S	2	15	ω	51		67	18	17	51	
		+		0		0	0		0	0	0	0	
		++		0	0	0	7		0	0	0	0	
		+++		0	0	0	0		0	0	0	0	
								1	1	1	1 1	1 1 1	: : : : : : : : : : : : : : : : : : : :

TABLE 13 - 46

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ON SCHEDULE
2 0
OR
ANIMALS FOUND DEAD, KILLED IN EXTREMIS (TREATMENT PERIOD)
FOUND
ANIMALS

	SEX X		MALE				u.	FEMALE	!	
GAN FINDINGS		52	10	100	1000	522	10	100	1000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	(NO. EXAMINED) : (52) ((15) (52))(67))(18)((17)(51)	
	1)									
FIBROSIS	1	7 8	14	∞	52	27	18	17	51	
	+	м.	Α (0 (0 (~ ~	00	0 0	0 0	
	+ + + + +	0 1	00	00	00	00	0	00	00	
			* * *							
MIGRATION OF HEMOSIDERIN-LADEN		52	11	80	52	67	18	17	51	
CELLS	+	0	M	0	0	0		0	o	
		0	₽	0	0	0		0	0	
	++++	0	0	0	0	0		0	0	
немприная	ı	52	15	∞	52	67		17	20	
	+	0	0	0	0	0		0	0	
	++	0	0	0	0	0	0	0	1	
	++++	0	0	0	0	0		0	0	
			*							
HYPERPLASIA OF ISLET-CELLS		55	13	∞	51	67		17	51	
		0	2	0	0	0		0	0	
	++	0	0	0	Ţ	0		0	0	
	++++	0	0	0	0	0	0	0	0	
			•							
HYPERPLASTIC NODULE	1	52	15	83	51	67	18	17	51	
	+	0	0	0	0	0		0	0	
	++	0	0	0	←	0		0	0	
		(,	•	•			c	<	

1) GRADE: -, NEGATIVE; +, SLIGHT; ++, MODERATE; +++, SEVERE. ** P<0.01 *** P<0.001

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

NO. 83004																			
STUDY NO.		1000	51)		75	6	0	0		51	0	0	0	ć	20	0	~ 1	0	
	Ш	100	17)(17	0	0	0		15	7	0	0	į	17	0	0	0	
1	FEMALE	10	18)(18	0	0	0		18	0	0	0		18	0	0	0	
		52) (67		40	6	0	0		25	7	~	0		6 7	0	0	0	
			J																
		1000	52)		8 7	7	0	0		52	0	0	0	4	52	0	0	0	
		100	8)(8		ఐ	0	0	0	* * *	7	0	2	ᠳ	,	∞	0	0	0	
	MALE	10	15)(14	7	0	0		15	0	0	0	,	15	0	0	0	
		52	52) (27	Ŋ	0	0		52	0	0	0	,	25	0	0	0	
1			V																
	SEX	LEVEL (PPM) : NO. NECROPSIED :	INED)	1)	1	+	++	+ + + +		1	+	+++	++++		1	+	+ +	+++	
		ORGAN FINDINGS	(CONTINUED) PANCREAS		INFILTRATION OF LEUCOCYTES					REGENERATIVE CHANGE					SEROSITIS				

1) GRADE : - / NEGATIVE; + / SLIGHT; ++ / MODERATE; +++ / SEVERE. *** P<0.001

TABLE 13 - 48

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

ORGAN FINDINGS							FEMAL	יר		
	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000	25	10	100	1000	
KIDNEYS	(NO. EXAMINED) : (52)()(67	52)(51)	(51)(52)(52)(52)	
	1)									
			*	*						
CALCIFICATION	i	24	67	52	50	6	11	89	11	
	+	Ŋ	0	0	7	7.5	41	77	4.1	
	++	0	0	0	0	0	0	0	0	
	++++	0	0	0	0	0	0	0	0	
	•						*	* *		
URINE CAST	1	52	67	52	51	77	31	32	41	
	+	0	0	0	0	7	21	50	11	
	++	0	0	0	0	0	0	0	0	
	++++	0	0	0	0	0	0	0	0	
			*							
CHRONIC PROGRESSIVE	ı	2	2	2	2	10	21	21	15	
GLOMERULONEPHROPATHY	+	33	19	23	37	28	20	23	28	
	++	14	21	16	æ	11	٥	Ŋ	6	
	+ + +	м	2	ω	7	2	2	M	0	
CONGESTION	ı	52	67	52	51	20	52	52	52	
	+	0	0	0	0	0	0	0	0	
	++	0	0	0	0	0	0	0	0	
	+ + + +	0	0	0	0	₽	0	0	0	
			-							
CYST	1	51	25	52	51	51	51	55	52	
	+	۲۱	2	0	0	0	0	0	0	
	+++	0	0	0	0	0	0	0	0	
	++++	0	0	0	0	0	7	0	0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05 ** P<0.01

TABLE 13 - 49

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
0	
OR	
EXTREMIS	(001
IN	PERIOD
KILLED	TREATMENT
DEAD	(TRE
FOUND	
ANIMALS	•

! ! !	1000	52)		77	00	0	52	0 0	0 0	>	c L	v 0	0	0	50	v C	0		51	- 0	0	
1 1 1 1 1 1 1	100	52) (4, 8,0	o ←	0	52	0 (0 0	>	ć t	۷ 0	0	0	20	v c	0		52	o 0	0	
FEMALE	10	52) (74	0	0	52	0 (0 0	0	,	7, -	0	0	51	C	00		52	၁င	0	
	52	51)(7 7	۰ ٥	0	51	0	0 0)		51	0	0	20	ı C	00		20	н С	0	
		V																				
	1000	51)		51	0	0	51	0	0 (0		51	o c	0	51	0 0	00		51	0 0	00	
; 1 1 1 1	100	52)(52	0	0	52	0	0 (0		20	· ^	0	52	0 0	00		52	00	00	
MALE	10) (67		67	00		48	H	0 (0		7 8	> ←	0	67	0 0	00	٠	67	0 0	00	
: : : : :	52	52)(52	o 0	0	52	0	0	0		52) C	0	52	0 (0		52	0 0	0	
; ; ; ;	1	~																				
SEX	LEVEL (PPM) : NO. NECROPSIED :	ED I	1)	1	+ +	+++	ı	+	++	++++		1 -	+ +	+ + +	1	+	+ + + + + +		l	+ :	+ + + + +	
!	JINGS	(CONTINUED) KIDNEYS (NO.		REGENERATIVE RENAL TUBULE			THE TREATED OF HEINARY THEM ES					FIBROSIS			GLOMERULOSCLEROSIS				HYALINE DROPLET DEGENERATION			

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 50

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED <u>IN EXTREMIS</u> OR ON SCHEDULE (TREATMENT PERIOD)

	 SEX	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	! ! ! !	i K	; ; 1 1 1				FEMALE			
	EVEL (PPM) O. NECROPSI	1 1	52	10	100	1000				00	000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
(CONTINUED)	(NO. EXAMINED) :		52)() (67	52)(51)	V	51)(52)(52)(52)	
	1)											
HYPERPLASIA OF MUCOSAL EPI	EPITHELIUM -		52	67	52 0	51		51	52 0	5.2 Ó	51	
	+ + + + + + +		00	00	00	00	•	00	00	00	00	
HYPERPLASIA OF RENAL TUBULES	ES		52	67	52	51		51	52	5.2	51	
	+ + ;		000	000	000	000		000	000	000	o ↔ c	
	++++		5	>	>	>		>	>)	o	
INFILTRATION OF LEUCOCYTES	1		16	* ທ	13	15		12	12	10	20	
	+ +		88 8	۰ م	25	35 4		ر د د	2,4	4 Λ Ο	v 0	
	+ + + +		0	0	ı (- i	0		0	0	0	0	
INTERSTITIAL NEPHRITIS	ţ		52	7 8	52	51		20	52	52	52	
	+ +		00	ч С	00	00		00	00	00	00	
	- + - + +		0		00	0		н	0	0	0	
NECROSTS	i		51	. 67	52	51		51	52	5.2	52	
	+ +		00	00	00	00		00	00	00	00	
	+ + + +		o ←	0	0	0		0	0	0	0	

1) GRADE: - . NEGATIVE; + . SLIGHT; ++ . MODERATE; +++ . SEVERE. * P<0.05

TABLE 13 - 51

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
N O	
OR	
EXTREMIS	~ ~
Z	PERIC
\sim	LNHWLAHAL
DEAD	TRE
FOUND	
ANIMALS	

			-									
	SEX	••		* MALE					FEMA	EMALE	i	
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		52	10	100	1000	 	52	10	100	1000	
CONTINUED) KIDNEYS	(NO. EXAMINED)		52)() (67	52) (51)	· · · · · · · · · · · · · · · · · · ·	51)(52)(52) (52)	
		1)										
				**		*				**		
PIGMENTATION		1	2	٦	7	14		₽	Ţ	0	2	
		+	40	27	33	33		18	5.4	4 2	20	
	T	++	7	20	13	4		27	5.4	6	29	
	7	+ + +	х	₽	2	0		S	М	1	₩	
2111 1370		1	r, C	7.7	Ç	7		ر. د	r C	2,2	5.3	
) - - -		+	, 0	, -) 1 C	÷ C		d C	, 1 C	, 1 C	, 0	
	•	+	· c	۰, ۲	· C				· c	· c	· c	
	+	· +	· c	٠) C	o c) C) C) C	o C	
)))	>)	>)	ò	
THICKENING OF BASEMENT M	MEMBRANE	ı	52	67	52	51		8 7	52	20	78	
		+	0	0	0	0		М	0	2	4	
	Ŧ	++	0	0	0	0		0	0	0	0	
		+ + +	0	0	0	0		0	0	0	0	
VACUOLAR DEGENERATION		1	51	8 7	52	51		51	52	52	52	
		+	0	0	0	0		0	0	0	0	
	+	++	7	1	0	0		0	0	0	0	
	+	+++	0	0	0	0		0	0	0	0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05 ** P<0.01 *** P<0.01

TABLE 13 - 52

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

STUDY NO. 83004

				MALE				U_ 	FEMALE		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) :		52	10 52	100 52	1000	52	2.17	100		
URINARY BLADDER	(NO. EXAMINED) :	V	52) (15)() (6	52)	67)	49) (18))(19)	(51)	
CALCUL0S1S	+ + + + + + + + + + + + + + + + + + + +		8 8 8 9	15000	0000	5 2 0 0 0	64	17 0 0	19	51 0 0	
EOSINOPHILIC COAGULATIVE SUBSTANCE	+ + + + + +		5 1 0 0	15 0 0	0000	S 0 0 0	49 0 0 0	118	19 0 0	510000	
HEMORRHAGE	1 + + + + + + + +		52 0 0	15 0 0	0000	21 0 0 0	48 0 1	18 0 0	10000	51 0 0	
HYPERPLASIA OF MUCOSAL EPI1	EPITHELIUM - + + + + + + + + + + + + + + + + + +		25 0 0 0	. 0 0 0	0000		64	18 0 0	14 0 0	51 0 0	
INFILTRATION OF LEUCOCYTES	1 + + + + + + + + +		52 0 0 0	15 0 0 0	* ~ ~ 0 0 0 *	0 0 0	4 4 0 0	18 0 0	19 0 0	70 0	
1) GRADF: - NEGATIVE;		MODERATE;	1		SEVERE.	 		 	1 1 1	1 1 1	

TABLE 13 - 53

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
N O	
OR	
DEAD, KILLED IN EXTREMIS	(TREATMENT PERIOD)
FOUND	
ANIMALS	

	SEX :		MALE	! ! ! !	[]]]] []	 		FEMALE	ы 1 1 1 1 1 1 1 1 1		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000		52	10	100 1000 52 52	1000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
CCONTINUED) URINARY BLADDER	(NO. EXAMINED):	(52)(52)(15)() (6	52)	Ü)(67	49)(18)(19)(19)(51)	
	1)										
INFLAMMATION	1 +	52	14	00	5.2 0		48	18 0	19 Ó	51	
	+ + + + + +	000	007	00	00		00	00	00	00	
1) GRADE : - , NEGATI	- , NEGATIVE; + , SLIGHT; ++ , MO	MODERATE; +++ , SEVERE		VERE.		 	i i i i	 	; ; ; ; ;	; ; ; ;	

13 - 54 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

	SEX		MALE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		! ! !	FEMALE	LE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
பொ	LEVEL (PPM) : NO. NECROPSIED :	52	10 15 1	100	1000	250	10	100	1000
TESTES	. EXAMINED)	52) (16)(10)(52)				
	. 1)								
ATROPHY	1 -	77	15	∞ (8 7				
	+ +	9 7) L) H	o ~				
	++++	स्न	0	₽	2				
NOTTERCET	1	51	16	10	52				
	+	⊣	0	0	0				
	+++	0	0	0	0				
	++++	0	0	0	0				
				¥					
HEMORRHAGE	1	55	16	6	52				
	+	0	0	0	0				
	++	0	0	Ţ	0				
	++++	0	0	0	0				
				**					
HYPERPLASIA OF LEYDIG CELLS		48	14	9	75				
	+ :	7 (∾ (ν) -	D 7				
	+ + + + +	0	0	10	10				
NECROSIS	ı	5.2	16	10	51				
	+ -)	>	>	⊣ ⊂				
	+ ++	0	00	0	0				
		•							
			1			11111111			

1) GRADE: -, NEGATIVE; +, SLIGHT; ++, MODERATE; +++, SEVERE. ** P<0.05 ** P<0.05

TABLE 13 - 55

دلا

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

D. KILLED IN EXTREMIS OR ON SCHEDULE	
0	
OR	
EXTREMIS	~ ~
Z	DERIO.
KILLED	TREATMENT P
DEAD,	TRE
FOUND	
ANIMALS FOUND DEAD,	

STUDY NO. 83004

	SEX:	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MALE	i 1 1 1 1	} } } ! ! ! ! !	1 1 1 1 1 1	FEMALE	! !		
ORGAN FINDINGS		52	1	10 100 1000 52 52 52	1000	52	10	10 100	1000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
(CONTINUED)	(NO. EXAMINED):	52) (52)(16)(10)(52)	10)(52)					
	1)									
		C L	,	C	ć					
PERIVASCULITIS	1 +) 1	0 0	· o	v 0					
	++	₽	0	₽	0					
	+ + + +	0	0	0	0					
			! ! ! ! !	 	1		1 1 1 1 1 1 1 1	1 1 1	1 1 1	

TABLE 13 - 56

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
N 0	
OR	
EXTREMIS	(001
N	PER]
KILLED	ENT
DEAD	(TREATM
FOUND	
ANIMALS	

0RGAN		1 1 1 1 1 1 1 1 .	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	: ! ! !			! ! ! !	 		
ORGAN	SEX :		MALE	u i			FEMALE	ALE		
FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000	52	10	100	1000	1 1 4 1 1 1 1
EPIDIDYMIS	(NO. EXAMINED) :	(52) ((15)(10)(52)					
	1)									
ATROPHY	1	51	15	6	52			٠		
	+	1	0	0	0					
	++	0	0	Н	0					
	+ + +	0	0	0	0					
ઇ 22 22 11 11 11	ı	5.2	14	10	52					
·	+	0	-	0	0					
	+++	0	0	0	0					
	+ + + +	0	0	0	0					
				*						
GIANT CELL GRANULOMA	1	55	15	6	52					
	+	0	0	0	0					
	+++	0	0	0	0					
	++++	0	0	7	0					
HYPERPLASTA OF MICOSAL FPT	MILL HELL	52	17	10	52					
		0	(-1	0	0					
	++	0	0	0	0					
	++++	0	0	0	0					

1) GRADE: -, NEGATIVE; +, SLIGHT; ++, MODERATE; +++, SEVERE. * P<0.05

13 - 57 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

STUDY NO. 83004

1							
1 1	1000						! ! !
FEMALE	100		•				1
Σ I	10						
	52						
1 1 1 1 1 1 1	1000	52)	11 0 0 0	51 0 0	W 0 0 0	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0 0 0 0
! ! !	100) (6	8 + 0 0	6000	* ₩ O T O	0000	* ~ ~ ~ 0 O
MALE	10	16)(1 0 0 0	9000	1 0 0 0	16 0 0	90 0
: : : : : :	52	52)(0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5.2	2000	45	5 0 0 0
SEX ::	PPM) : ROPSIED :	ED	! + + + + + +	! + + + + + +	1 + + + + + +	1 + + + + + + +	1 + + + + + + + + + + +
	LEVEL (NO. NEC				RANULOMA	OF MUCOSAL EPITHELIUM	INFILTRATION OF LEUCOCYTES
	ORGAN FIND	PROSTATIC GLAND	АТКОРНУ	FIBROSIS	GIANT CELL GRANULOMA	HYPERPLASIA (INFILTRATION

1) GRADE : * P<0.05

TABLE 13 - 58

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
N O	
OR	
EXTREMIS	(00:
Z	PERIOD
DEAD " KILLED	(TREATMENT
FOUND	
ANIMALS	

MALE	LEVEL (PPM) : 0 10 1000 0 10 100 1 1	iUED)) (NO. EXAMINED) : (52)(16)(9)(52)	1)	ı	+ 10 6 0 18	++ 2 0 1 1	+++ 0 1 0 1
	ORGAN FINDINGS	! !		INFLAMMATION			

TABLE 13 - 59

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN <u>EXTREMIS</u> OR ON SCHEDUL

		<u> </u>							STUD	STUDY NO. 83004
	. X II S	1 1 1 1 1	MALE	1 ! ! !	: : : : : : :	t 1	X U U	FEMALE	1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000	52	10	100	1000	
SEMINAL VESICLE	(NO. EXAMINED) : (52) (15)(10)(52)					
	1)									
ATROPHY	ı	13	7	7	10					
	+	31	4	7	27					
	+++	83	7	7	14					
	++++	0	0	0	1					
DILATATION OF GLAND	1	51	15	10	52					
	+	←	0	0	0					
	+++	0	0	0	0					
	++++	0	0	0	0					
INFLAMMATION	1	52	14	10	52					
	+	0	0	0	0					
	++	0	0	0	0					
	+++	0	7	0	0					
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1	! ! ! !	! ! ! ! !	
		1		1						

TABLE 13 - 60

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

MALE	ED: 52 52 52 52 52 52 52	(1)(0)(0)(1)		+ 1 0 0 0	0 0 0 0 ++	0 0 0 0 +++	
SEX:	 	Ü	1)	ı	+	++		
		BULBOURETHRAL GLAND						

TABLE 13 - 61

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
2 0	
OR	
EXTREMIS	(00:
N	PERIO
Δ	TREATMENT
D	(TRE
FOUND	
ANIMALS	

	SEX :	 	MALE	 			FEMALE	ALE		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000	25 25	10 10 25 2	100	1000	
OVARIES	(NO. EXAMINED) :					(51)((18) (18) (52)	
АТКОРНҮ	1 + + + + + + +					9 M M O	18 0 0	16. 00 0	48 11 13	
CONGESTION	1 + + + + + +					51 0 0	18	18000	51 0 0	
CYST	+ + + + + +					51 0 0 0	18 0 0	17 0 0	51 0 0	
FOLLICULAR CYST	+ + + + + +	·				44 1 1 0	18	16 0 0	51 0 0	
INFILTRATION OF LEUCOCYTES	+ + + + + + +	 	i : : : :	 	! ! ! ! !	4 8 Ω € 0	188	1000	4 4 7 1 1 0 0	

TABLE 13 - 62

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
N O	
OR	
IN EXTREMIS	(00)
N	PERIOD
KILLED	TREATMENT P
DEAD	(TRE
FOUND	
ANIMALS	

	SEX .		MALE					FEMALE	آ E	
852	\sim $^{\circ}$	52	10	100	1000		52	10	100	1000
CONTINUED) OVARIES	(NO. EXAMINED) :	1 1 1 1 1 1	: ! ! ! !	! ! ! !		V	51)(18)(18)(52)
	1)									
INCREASE OF CORPUS LUTEUM	ı						51	18	* 4	52
	+ + + + + +						000	000	л с	000
	-						•	•	,	•
INCREASE OF INTERSTITIAL CELLS	+ + + + + + + + + + + + + + + + + + +						51 0 0	18 000	18 000	8 N N O

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

TABLE 13 - 63

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

	SEX ::		MALE	1				FEMALE	 	1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	LEVEL (PPM) :	52	, 10 52	100	1000		52	10 52	100	1000	
UTERUS	(NO. EXAMINED) :					~	51)(18)(19)(52)	
	1)										
CYSTIC ENDOMETRIAL HYPERPLASIA	PLASIA + + + + + + + + + + + + + + + + + + +						0 0 0 0	18 0 0	19 0 0	51 0 0	
DILATATION OF DUCT	1 + + + + + + + + +						4 % % % % % % % % % % % % % % % % % % %	1 1 1 0	17 1 0	4 4 1 1 1 1	
HEMORRHAGE	1 + + + + + + + + +						50 0 1	17 1 0	19	52 000 000	
HISTIOCYTOSIS	! + + + + + +						50 0 0	78 000 000	16 0 0	52 0 0 0	
HYPERPLASIA OF ENDOMETRIAL EPITHELIUM	AL + + + + + + + + + + + + + + + + +						50 0 1 0	18 0 0	19	0 1 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

13 - 64 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE
N O
0 R
DEAD, KILLED IN EXTREMIS (TREATMENT PERIOD)
FOUND
ANIMALS

ORGAN FINDINGS NO. (CONTINUED)	. > 1.0		-							
) I N G S 	• 426	1	MALE					FEMALE		;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
(CONTINUED)	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000	0 52	0 10	0 100	0 1000	1
UTERUS (NO.	(NO. EXAMINED):	1 1 1 1 1 1 1	! ! ! !	1 1 1 1	! ! ! ! ! !	5)	51)(18	18)(1	19)(52)	
INFILTRATION OF LEUCOCYTES	' + + + + + +					43 00 0	3 17 3 0 0		16 44 3 8 0 0 0 0	
NECROSIS	1 + + + + + + + + +					51 0 0	18		19 51 0 0 0 1 0 0	
PIGMENTATION	+ + + + + +					16 35 0	* 17 * 0 0 0 * * 0 0 0 0 0 0 0 0 0 0 0 0 0	1118	3 22 1 29 0 1	

TABLE 13 - 65

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

	SEX:		MALE				1	FEMALE			
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000		52	10	100		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
VAGINA	(NO. EXAMINED			-		J	50)(19)(18)(52)	
АТКОРНУ	1 + + + + + + +						4 0 1 0 1	19 0 0	7 0 0 0	7 0 0 7 0	
DILATATION OF DUCT	1 + + + + + + +						0000	10 00 0	17 0 1	50 00 00	
HYPERPLASIA OF MUCOSAL EPITHELIUM	THELIUM + + + + + + + + + + + + + + + + + + +						47 1 1	19	18 0 0	51 0 0	
INFILTRATION OF LEUCOCYTES	1 + + + + + + + + + + + + + + + + + + +						7 7 9 0	19 0 0	. 16 0 0	9900	
INFLAMMATION	1 + + + + + +						6 7 0 0 0 0	19 0 0	18 0 0	25 00 00	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 66

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

	OR ON SCHEDULE	
	2 0	
1	OR	
	ND DEAD, KILLED IN EXTREMIS OR C	1001
:	Z	0 40
	KILLED	TMENT
	DEAD,	/ HDEL
	FOUND	
	ANIMALS FOUND DEAD, KILLED	

83004	1 1 1 1 1 1 1 1 1	! ! ! ! ! ! !																								! ! ! ! ! ! !
STUDY NO.	1 1 1 1 1 1	 1 1 1 1																								; ; ;
	! !	1000	51)			67	~ ←	0		48	M	0	0	43	S	M	0	,	, , ,	. ~	0	43	Λ .	2		1
		100	18)(18	00	00		15	7	0	7	15	-	2	0		7 10	0	0	16	П.	, 	0	1
	FEMAL	10	18)(*	15	m c	00		17	-	0	0	15	7	←	0	r.	. v.	0	0	16	 1	~ 1	ɔ	1
1		52	51)(•	20	۲, ۲	00		48	М	0	0	43	7	←	0		τ ν α) (- 4	0	4.1	4	9	o	: : : :
			J																							1
		1000	(67			67	0 0	00		9 7	Н	2	0	97	~	(-1	0		у С	• 0	0	67	0	0	0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		100	10)(10	0 0	00	×	6	~	0	0	10	0	0	0	C	ν ←	0	0	۰.	, - 1	0	o	! ! !
	MALE	10	17)(17	00	00		17	0	0	0	17	0	0	0	*	0 -	. 0	0	17	0	0	0	1
- !		52	50)(20	0 0	00		20	0	0	0	67	←	0	0		, ,	0	0	67	H	0)	
1 1 1	••		~ 	^																						1
1 1 1 1 1	SEX	LEVEL (PPM) NO. NECROPSIED	EXAMINED)			1	+ +	+ + +		1	+	++	++++	í	+	++	+ + +		i +	+	+++	ı	+	++	++++	- 1
		LEVEL	.0N)																HENOSIDERIN-LADEN			OF CHROMOPHOBE CELLS				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		ORGAN FINDINGS	PITUITARY GLAND			CONGESTION				CYST				HEMORRHAGE					MIGRATION OF A)		HYPERPLASIA OF				

1) GRADE : - . NEGATIVE; + . SLIGHT; ++ . MODERATE; +++ . SEVERE. * P<0.05

TABLE 13 - 67

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

	IMALS	FOUND DE	DEAD, KILLED <u>in</u> < TREATMENT PERI	ED IN EX.	EXTREMIS OR	N O	SCHEDULE			STUDY NO.	NO. 83004
	SEX :	 	MALE	; ; ; ; ;	: : : : : : :	! ! ! ! !	! ! ! ! !	FEMALE	l l l l ш		
ORGA FI	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000	 	52	10	100	1000	
(CONTINUED) PITUITARY GLAND	(NO. EXAMINED) :)(05)	17) (10)((67	V	51)(18)(18)(51)	
	1)										
HYPERTROPHIC CHANGE	1	20	17	10	67		51	18	18	20	
	+ ++	00	00	00	00		00	00	00	۰ 0	
	. + + + + +	0	0.	0	0		0	0	0	0	
SWELLING OF BASOPHILIC CELLS		67	17	10	67		51	18	18	51	
	+	1	0	0	0		0	0	0	0	
	++	0	0	0	0		0	0	0	0	
	+ + + +	0	0	0	0		0	0	0	0	
								1	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 68

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

	SEX	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!] 	MALE		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 	: : : : : : :	FEMALE	! ! ! ! ! ! ш	 	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		0 52	10 52	100	1000	i i i i i i i i i i i i i i i i i i i	52	10	100	1000	
THYROID GLANDS	(NO. EXAMINED) :	V	52)(15)(10)(52)	J	51)(18)(18)(50)	
CYST	1 + + + + + + + + +		0 0 0 0	15 0 0	0000	N O O O		51 0 0	18 000	18 0 0 0	0000	
ENLARGEMENT OF FOLLICLE	. + + +		51 0 0	13 0 0 0	0000	ν 0 0 0		51 0 0	17 0 1	18 000	49 0 1	
MIGRATION OF HEMOSIDERIN-LADEN CELLS	ADEN + + + + + + + + + + + + + + + + +		52 000 00	15 0 0	0000	S 0 0 0		50 0 0	7 0 0 0	18 000	0000	
немоккнабе	· + + + + + +		52 0 0	15	0000	5.2 0 0		50 0 0	18 0 0	18 0 0	000	
HYPERPLASIA OF FOLLICULAR EPITHELIAL CELLS	1 + + + + + + + + + + .		S 0 0 0	. 15	0 0 0	5.2 0 0		0 0 0	7 0 0 0 0	18 00	7 7 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++, , MODERATE; +++ , SEVERE.

TABLE 13 - 69

52

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

OR ON SCHEDULE	
N O	
OR	
KILLED IN EXTREMIS	PERIOD)
KILLED	TREATMENT P
DEAD, K	CTR
FOUND	
ANIMALS	

STUDY NO. 83004

	SEX:		MALE					FEMALE	LE		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000	1	52	10 100 52 52	100	1000	
CONTINUED) (HYROID GLANDS	(NO. EXAMINED) :	(52)(15)(10)(. ₁	V	51)(18)(18)(
	1)										
HYPERPLASIA OF C-CELLS	1 + + + + + + + +	47 3 0	13 2 0 0	0000	47 5 0		31 10 0	77 0 0 0	1,4 4 0	131 00 0	

TABLE 13 - 70

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ON SCHEDULE	
O	
OR	
TREMIS	PERIOD >
	A H D H D
KILLED	TREATMENT
DEAD,	TAF
FOUND	
ANIMALS FOUND	

STUDY NO. 83004

	SEX :			MALE					FEMALE	LE		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		0 52	10	100	1000		52	10	100	1000	
PARA	(NO. EXAMINED) :	J	33)(12)() (9	23)	V	38)(8)(8	13)(34)	
	1)											
HYPERPLASIA OF CHIEF CELLS	1 + + + + + + + +		M 0 0 0	12 0 0	9000	23		90 00 00 00	∞ 000	1,0 0 0 0	34	
INFILTRATION OF LEUCOCYTES	1 + + + + + + + +		M 0 0 0	12 0 0	% 000	0 0 0 0 M		8 0 0 0 8 0 0 0	8000	13 0 0 0	33 0 0	

13 - 71TABLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

			-		70171	`					STUDY NO.	. 83004
	SEX		 	MALE	! ! ! ! !		[: ! ! !	FEMALE	 .LE	! ! ! ! ! ! !	1 1 1 1 1 1 1 1 1
ORGAN	LEVEL (PPM) : NO. NECROPSIED :		52	10 52	100	1000		52	10	100	1000	
ADRENAL GLANDS		٠. پ	52)(16)(10)(51)	J	50) (51)() (67	51)	
	1)											
ANGIECTASIA	1 -	01	2.5	16	10	51		77	97	.v.	45	
	+ + + + + + + +		000	000	000	000		0 7 4	N 01 41	- 70	n m 0	
CONGESTION		01	5.0	16 0	10	51		48 1	47	, 48 0	47	
	+ + + + + +		00	00	00	00		H 0	0 0	۰ 0	0	
CYST	1 +	U,	52	16 0	10	51		20	51	67	000	
	+ + + + + + + + + + + + + + + + + + + +			00	00	00		00	00	00	1 0	
EXTRAMEDULLARY HEMATOPOIESIS		u	52	16 0 0	10 0	51		000	8 % 0	64	* 27	
	+ + +		0		0	0		0	0	0	0	
HEMORRHAGE	+ + + + + + +	U	52 000 000	15 0 0 1	0000	51		48 2 0 0	0 0 0 0	6000	47 3 0 1 1 3	

1) GRADE: -, NEGATIVE; +, SLIGHT; ++, MODERATE; +++, SEVERE. * P<0.05

TABLE 13 - 72

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED <u>IN EXTREMIS</u> OR ON SCHÆDULE (TREATMENT PERIOD)

DRGAN FINDINGS (CONTINUED) ADREMAL GLANDS (NO. HYPERPLASIA OF CORTIC CELLS HYPERPLASIA OF MEDULLARY CELLS	LEVEL (PPM) : SEX :	52	10	10000000000000000000000000000000000000	50 50 50 50 50 60 60 60 60 60 60 60 60 60 60 60 60 60	50 50 50 60 60 60 60 60 60 60 60 60 6	FEMALE 10 1 10 1 52 1 51 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7	1000 1000 52 0 0 11 11 11 10 0 0	
HYPERPLASTIC NODULE	1 + + + + + +	2000	16 0 0	10 0 0	0 0 0	49 1 0	51 0 0	64000	0000	
INFILTRATION OF LEUCOCYTES	1 + + + + + +	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	. 90 0	10 000	0 0 0	4 9 0 0 4	7 7 7 0 0	74 0 0	7 7 0 0 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 73

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

	SCHEDULE	
	z O	
	OR	
	ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDUL	(00
	IN	PERI
	KILLED	TREATMENT PERIOD
	DEAD,	(TRE/
!	FOUND	
	ANIMALS	

) - R	C TREATMENT	PERIOD	^					STUDY	NO. 83004
	SEX	 	; ; ; ;	MALE	! ! ! !	1 1 1 1 1 1	! ! ! ! !	: : : : :	FEMALI	1 1 1 1	1 1 1 1 1 1	
ORGAN FINDINGS	EL (PPM) NECROPS	1 1 1 1	52	10	100	1000	! ! !	52	10	100	1000	
(CONTINUED) ADRENAL GLANDS	CNO. EXAMINED) :	_	52)(16)(10) (51)		50) (51)() (67	51)	
	1)											
MIGRATION OF MACROPHAGE	ı		5.2	16	0	7.		20	20	67	51	
	+		0	0	0	0		0		.0	0	
	+ +		0	0	0	0		0	0	0	0	
	+++++		0	0	0	0		0	0	0	0	
NECROSIS	1		52	16	10	67		67	51	67	51	
	+		0	0	0	0		0	0	0	0	
	++		0	0	0	0		0	0	0	0	
	+ + +		0	0	0	2		₩	0	0	0	
NOT TATING MALE	1		7.	16	10	12		67	51	8 7	51	
	+		, (-1	0	0	0		7	0	0	0	
	++		0	0	0	0		0	0	↵	0	
	+ + + +		0	0	0	0		0	0	0	0	
SWELLING OF CORTICAL CELLS	1		52	16	10	51		67	51	67	51	
			0	0	0	0		₽	0	0	0	
	++		0	0	0	0		0	0	0	0	
	++++		0	0	0	0		0	0	0	0	
				* *							¥	
VACUOLAR DEGENERATION OF CORTICAL			4.7	S	7	07		38	33	31	30	
CELLS	+		7	6	2	6		11	16	14	14	
			₽	-	←	2		← '	,–1 ⋅	7	4 1	
	+ + +		0	7	0	0		0	←	0	M	
												1 1 1 1 1 1

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05 *** P<0.001

TABLE 13 - 74

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NOW-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED <u>IN EXTREMIS</u> OR ON SCHEDULE (TREATMENT PERIOD)

	SEX	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MALE	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		; ! ! ! !	! ! ! !	FEMALE		1	
ORGAN FIMDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000		52	10 11 52	100	1000	
BONE (FEMUR)	(NO. EXAMINED) :	(52) (17)(10)(52)	Ü	51)(19)(19)(52)	
HYPEROSTOSIS	- + + + - + + - +	8000	. 170 00 0	0000	S S O O O		0 1 0	19 0 0	0 0 0	S S S S S S S S S S S S S S S S S S S	
OSTEOSCLEROSIS	1 + + + + + + + +	8000	. 17 0 0 0	10000	5.2 0 0 0		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	16 0 2 1	18 0 1	2 8 W H O	

TABLE 13 - 75

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ON SCHEDULE	
O	
Ö	
IN EXTREMIS	00)
N	PERIOD
KILLED	TREATMENT F
DEAD,	(TRE/
FOUND	
ANIMALS	

			- N = N - I - I - I - I - I - I - I - I - I -	מסו אם אין אין אין אין אין אין אין אין אין אין	000						STUDY NO.	83004
	· XBS			MALE		 	! ! ! ! !	. — ! ! ! !	FEMALE	! ! ! !] 	! ! ! ! !
ORGAN	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000		52	10	! ! ! ! ! !	100 1	1000	
MUSCLE (Q. FEMORIS)	(NO. EXAMINED) :	25	52)(16	16)(10)((25)		(51	51)(18	18)(19)(52)	
АТRОРНҮ	1 + + + + + + + + +	5000	15 0 1	1000	S 0 0 0		50 0 1	18 0 0	2000	0.0 0.0 0.0	50 0 0 0	
HISTIOCYTOSIS	1 + + + + + +	N 0 0 0	16 0 0	0000	52 0 0 0		50 0 0	18 0 0	8000	19 0 0	5.2 0 0	
HYALINE DEGENERATION	1 + + + + + + + + + + + + + + + + + + +	5000	10 0 10	1000	52 0 0		51 0 0	18 0 0	8000	19 0 0	52 0 0	
INFILTRATION OF LEUCOCYTES	1 + + + + + +	52 0 0	16	10	52 0 0	 	51 0 0	118	# O O O	199	51 0 0	

TABLE 13 - 76

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED <u>IN EXTREMIS</u> OR ON SCHEDULE (TREATMENT PERIOD)

	SEX:	i i i i	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	: : : : : : :	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	! ! !	52	10	100	1000	1 1	52	10	100	1000	
SKIN	O. EXAMINED)	V	52)(16)(10)(52)	~	51)(18) (19)(52)	
	1)											
DERMATITIS	1 + + + + + + + + +		52 000 000	16 0 0	1000	51 0 0		51 0 0	18 0 0	6,000	52 0 0 0	
EPIDERMOID CYST	1 + + + + + + + + +		52 0 0	91 0000	10 0 0	52 0 0 0		4 1 1 0	18 000 000	19000	10001	
FOLLICULITIS	1 + + + + + + + +		51 0 1	90 00 00	10 00 0	52 0 0		51 0 0	18 0 0	19000	51 0 1 0	
HEMORRHAGE	1 + + + + + + + +		52 0 0	79 000	0000	50 00 00		50 0 1	18 0 0	0000	S 0 0 0	
HISTIOCYTOSIS	+ + + + + + + + + +		52 0 0	16 0 0	1000	0 0 0 0		50 0 1	18 0 0	1 0 0 0	50 00 00	

- , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. 1) GRADE:

TABLE 13 - 77

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
N _O	
OR	
D IN EXTREMIS	^ G
N	7 2 2 1
D DEAD, KILLED	TMFNT
DEAD	(TRF/
FOUND	
ANIMALS	

FEMALE	0 10 100 1000 2 52 52 52	51)(18)(19)(52)		18 19	0 0	0 0 0 0	0	18 19	0	0 0 0 0	0 0	
	52	5		7				5			•	
	1000	52)		52	0	0	0	51	0	7	0	
	100	10)(10	0	0	0	10	0	0	0	
MALE	10 52	16)(16	0	0	0	16	0	0	0	
	52	52) (52	0	0	0	67	-	2	0	
		Ü										
SEX :		(NO. EXAMINED) :	1)	I	+	++	+ + + +	1	+	+ +	+++	
	ORGAN FINDINGS	(CONTINUED) SKIN		INFILTRATION OF LEUCOCYTES				KERATOSIS				

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 13 - 78

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED <u>IN EXTREMIS</u> OR ON SCHEDULE (TREATMENT PERIOD)

STUDY NO. 83004

	SEX:			MALE	; ; ; ; ;	: : : : : : :	 	i 1 1 1 1	FEMALE			
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		0	10	100	1000 52	! ! !	52	10	100	1000	
SKIN (SUBCUTIS)	(NO. EXAMINED) :	J	52) (16)(10)(52)		51)(18) (19) (52)	
	1)											
INFILTRATION OF LEUCOCYTES	! +		52	16	10	52 0		50	18 0	19 0	52 0	
	+ + + + +		00	00	00	00		00	00	00	00	
INFLAMMATION	1 +		51	16	10	52		51	18	19	5.0	
	+ + + + + +		00	000	000	000		000	000	000	000	
		1	!	1 1 1 1 1	 	: : : : : :		1	1			

13 - 79 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
N O	
OR	
EXTREMIS	00 >
Z	PERI(
LED	E Z
DEAD,	(TREATMI
FOUND	
ANIMALS	

		_	KEALMEN	rekiou						STUDY NO. 8	83004
] ; ; ; ; ;	 MALE	 	: : : : :	1 1 1 1 1 1	! ! ! ! !	FEMALE	П П		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10 110 110 110 110 110 110 110 110 110	100	1000	i 1 i 1 i 1 i 1	52	10	100	1000	
MAMMARY G	AMI	(52)	(16)(10)(51)	S	52)(18)(19)(52)	
DILATATION OF GLAND	1 + + + + + +	39 11 2 0	1000	0000	0 0 7 7		1100	16 2 0 0	1, 0, 1,0	50 1 0	
HYPERPLASIA	1 + + + + + + + + + + + +	52 0 0	16 0 0	* 0 0 00	15 0 0		41 3	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	16 0 0	44 5 2 1	
HYPERSECRETION	1 + + + + + + + +	82000	16 0 0	10 00 0	 		% 0000	18 000	00 0 0	51 0 1 0	
INFILTRATION OF LEUCOCYTES	1 + + + + + +	SS 0 0 0	14 6 0 0 0 0	0 0 0	51 0 0		0 0 0	18 0 0 0	17 2 0 0	N 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. + P<0.05

. TABLE 13 - 80

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ON SCHEDULE	
S O	
O _R	
TREMIS	00
7	PERIOD
KILLED	TREATMENT P
DEAD,	(TRE
FOUND	
ANIMALS	

4, 4, 19, (18) (18) (4, 19) (18) (4, 19) (18) (4, 19) (18) (4, 19) (18) (4, 19) (18) (4, 19) (18) (4, 19) (18) (4, 19) (18) (4, 19) (18) (4, 19) (4, 1			! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	MALE					FEMALE			
TOTION, SCLERA HAGE TOTION SCLERA	RGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10 52		1000		52	10	100	1000	
** SCLERA ** - 51 16 10 49 44 19 18 18 14 19 18 19 18 19 18 19 19 19 19 19 19 19 19 19 19 19 19 19	BALLS		52) (16)(10)(52)	~) (67	19)(18)(52)	
- 51 16 10 49 44 19 18 18 18 19 18 19 18 19 18 19 18 19 18 19 19 18 19 19 19 19 19 19 19 19 19 19 19 19 19		1)										
+ + 1 0 0 0 3 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CALCIFICATION, SCLERA	1	51	16	10	67		77	19	18	48	
- 49 16 10 50 45 19 17 - 49 16 10 50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+ +	0 ~	00	00	m c		n c	0 0	00	7 C	
- 49 16 10 50 45 19 17 +++ 0 0 0 0 1 3 0 0 +++ 0 0 0 0 0 0 0 +++ 1 0 0 0 0 1 1 0 0 - 51 15 10 52 49 19 18 +++ 0 0 0 0 0 0 0 0 - 52 16 10 52 49 19 18 - 52 16 10 52 49 19 18 +++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		- + - + +	4 0	0 0	0	00		0	0	0	0 0	
0F LEUCOCYTES + + 2 0 0 0 1 1 3 0 0 1 1	CATARACT	1	67	16	10	20		45	19	17	25	
++ 0 0 0 0 0 0 0 1 +++ 1 1 0 0 0 0 0 0 0 0 - 51 15 10 52 49 19 18 ++ 1 1 0 0 0 0 0 0 0 0 +++ 0 0 0 0 0 0 0 0 0 - 52 16 10 52 49 19 18 ++ 0 0 0 0 0 0 0 0 0 - 52 16 10 52 49 19 18 ++ 0 0 0 0 0 0 0 0 0 - 6 1 1 18 - 52 16 10 51 48 19 18 ++ 0 0 0 0 0 0 0 0 - 1 1 1 0 0 0 - 1 1 1 0 0 0 - 0 0 0 0 0 0 0 - 0 0 0 0 0 0 0		+	. 2	0	0	. ~		М	0	0	2	
OF LEUCOCYTES +++		+++	0	0	0	0		0	0	Ţ	-1	
OF LEUCOCYTES - 51 15 10 52 49 19 18 + 1 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+ + +	7	0	0	⊣		←	0	0	~	
0F LEUCOCYTES - 52 16 10 51 48 19 18 - 52 16 10 52 49 19 18 +++ 0 0 0 0 0 0 0 0 +++ 0 0 0 0 0 0 0	HEMORRHAGE	t	51	15	10	52		67	19	18	52	
0F LEUCOCYTES - 52 16 10 51 48 19 18 18 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+	₽	⇌	0	0		0	0	0 (0 (
0F LEUCOCYTES - 52 16 10 52 49 19 18 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+++	0 (0 (0 (0 (0 0	0 0	0 0	0 0	
OF LEUCOCYTES - 52 16 10 52 49 19 18 + 0 0 0 0 0 0 0 0 +++ 0 0 0 0 0 0 0 - 52 16 10 51 48 19 18 +++ 0 0 0 0 0 0 0 +++ 0 0 0 0 0 0 +++ 0 0 0 0		+ + +	၁	0	၁	ɔ		>	5	0	0	
0F LEUCOCYTES - 52 16 10 51 48 19 18 + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	HEMOS TO FROS TS		52	16	10	52		67	19	18	51	
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+	0	0	0	0		0	0	0	₽	
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		++	0	0	0	0		0	0	0	0	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		+ + +	0		0	0		0	0	0	0	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	INFILTRATION OF LEUCOCYTES		52	16	10	51		48	19	18	52	
			0	0	0	Н		⊣	0	0	0	
		++	0	0	0	0		0	0	0	0	
		+++	0	0	0	0		0	0	0	0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
NO	
OR	
IN EXTREMIS	PERIOD)
Ш	(TREATMENT
FOUND	
ANIMALS	

STUDY NO. 83004

	SEX:			MALE					FEMALE	LE	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		52	10	100	1000	1 1 1 1	52	10	100	1000
CONTINUED)	(NO. EXAMINED) :	5	52) (16)(10) (52)	V)(67	19)(18)(52)
	1)										
RETINAL ATROPHY	1 + + + + + + + + + + + + + + + + + + +	U1	0000	16 0 0	10 0 0	51 0 1		4	6000	1,7 0 0 1	47 0 8 8
									1		

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CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

IN EXTREMIS OR ON SCHEDULE	
N O	
OR	
EXTREMIS	((0)
IN	L C L
KILLED	TNEMTARKT 5
DEAD,	TPF
FOUND	
ANIMALS	

			, TRE	TREATMENT PERIOD	PERIOD	^					STUDY	Y NO. 83004	
1	SEX :	! ! !	! ! ! !	MALE]]]	! ! ! !	 	FEMALE		! !		!
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	! ! [] [] []	52	10	100	1000	[52	10	100	1000		!
HARDERIAN GLANDS	(NO. EXAMINED) :	J	52)(16)(10)(52)	J	51)(19)(18)(52)		
	1)												
ATROPHY	ı		52	16	10	52		20	19	18	52		
	4 4		00	00	00	00		۲1 (00	,o c	00		
	+ + + + + +		00	00	0	0		00	00	0	0		
			C	, U	6	Ç		ر د	0	α	c		
DILAIAIION OF GLAND			V C	۲ -) C	v C		7 0	٠ C	9 0	y 0		
	+++		0	4 0	0	0		0	0	0	0		
	+ + +		0	0	0	0		0	0	0	0		
GRANULATION	,		52	16	10	52		51	19	18	50		
	+		0	0	0	0		0	0	0	~ ~		
	+ + + + + + +		00	00	00	00		00	00	00	00		
A LICOND IS A LOGGED A BROWN A LICOND IS A LOGGED A LOGGE	FPITHERIAI		52	16	10	55		50	19	18	52		
CELLS			10	0	0	0		, (1	0	0	0		
	+++		0	0	0	0		0	0	0	0		
	+ + + +		0	0	0	0		0	0	0	0		
				*	×					!	c t		
HYPERSECRETION	i		51	13	ω ,	4.8		67	19	17	20		
	+ ;		← (m (~ 0	7 0		√ ()	.⊣ c	V C		
	+ +		> C	5 C	> C	-		o c	o c	o c	0 0		
	+++		>	>	>	>		>	>	>)		

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

S	1	100 1000 52 52	52)	
1	ш	100	18)(
	FEMALE	0 10 100 1000 52 52 52 52	19)(
		52		
ON SC			_	
08 (i 1 1 1	
TREMIS)	 	1000	52)	
PERIOD	 	100	10)(
ANIMALS FOUND DEAD, KILLED <u>IN EXTREMIS</u> OR ON SCHEDULE (TREATMENT PERIOD)	MALE	1 0 2	16)(
DEAD.	1 1 1	52	52)(
ONNO:	1 1 1	! ! ! !	· ·	
S			! ! !	1)
. ANIMAI	SEX	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINED): (52)(16)(10)(52)	
	i	Z Z	5	

25000

8000

000

51000

25000

0000

9000

1 1 0

1 + + + + + + + +

INFLAMMATION

31 21 0

146

31 20 0

36 16 0

0000

13 0 0 0

40 120 0

1 + + + + + + +

INFILTRATION OF LEUCOCYTES

(CONTINUED) HARDERIAN GLANDS

FINDINGS ORGAN

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. ** P<0.01

13 - 84 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
N 0	
OR	
IN EXTREMIS	00)
Z	PERIO
KILLED	TREATMENT P
DEAD	(TRE
FOUND	
ANIMALS	•

	: ! ! ! !	SEX			MALE				 	FEMALE		: ! ! !	
ORGAN FINDINGS	LEVEL NO. NE	LEVEL (PPM) : NO. NECROPSIED :		52	10	100	1000		52	10 52	100	1000	
BRAIN		NED >	J	52)(15)(10)(52)	J	52)(18)(18)(52)	
АТКОРНУ		1 + + + + + + + + + + + + + + + + + + +		2 0 0 0	15 0 0	10 0 0	8 0 0 0		51 0 0	* 4 2 2 2 2	8 0 0 0	8 0 0 0	
DILATATION OF CEREBRAL VENI	VENTRICLE	1 + + +		7 N N O	133	6100	20 1 1 0		44 7 8 0	12 2 0 1 2 2 2 3	7 0 0 0 0	7 7 8 0 0 3 8 7	
ENCEPHALOMYELITIS		1 + + + + + + + + + + + + + + + + + + +		51 0 0 0	15 0 0	10000	52 0 0		52 000 00	18 0 0	1000	N 0 0 0	<u>.</u>
6L10S1S		1 + + +		2000	15 0 0 0	10 0 0	% 0 0 0		25 0 0	18 0 0	18 0 0 0	0 1 0	
MIGRATION OF HEMOSIDERIN-LADEN CELLS	ADEN	1 + + +	! !	22 00 00	15	0000	S O O O	 	67	1000	7000 000	00 0	 1 1 1 1 1 1 1 1 1

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

13 - 85 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

	SEX : MALE	1 1 1 1 1 1 1 1		FEMALE	
BRAIN (CONTINUED) (NO. EXAMINED) : (HEMORRHAGE HYPERPLASIA OF EPENDYMAL CELLS	52 55	100 1000 52 52	52 55		1000
ENDYMAL CELLS +++ +++ +++ +++ +++ ++++ ++++ ++++++++		10)(52)	(52)(1	18)(18)(52)
ENDYMAL CELLS + + + + + + + + + + + + + + + + + +	1)				
ENDYMAL CELLS + + + + + + + + + + + + + + + + + +		0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7 m m c	16 16 2 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
1 + + + 1 + + + + + -	2000	ľ		₩) 0 0 0 0
1 + + +	51 10 0 11 1	ιΛ			52 0 0 0
0 +++	- 51 15 + 1 0 ++ 0 0 0	10 52 0 0 0 0	52 0 0	18 18 0 0 0 0 0 0	52 0 0 0
PIGMENTATION - 21 + 31 + 31 ++ 0 +++ 0		2 8 8 27 0 0 0	** 750 000	** 17 7 1 11 0 0	15 37 0 0

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05 ** P<0.01 *** P<0.001

TABLE 13 - 86

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

OR ON SCHEDULE	
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OR	
FREMIS	~ ~
IN EX	au.
KILLED	TNEWTVECT /
DEAD,	TOT
FOUND	
ANIMALS	

	s ex		MALE	ш				FEMALE		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	10 100	1000		52	10 100	! ! ! !	1000
CONTINUED)	(NO. EXAMINED) : ((52)((15)(!	52)	V	52)(18)(18)(52)
	1)									
PROLIFERATION OF GLIA CELLS	- 	51	15	10	52		52	18	18	52
	+ +	ч С	00	00	00		00	00	00	00
	+ +	0	0	0	0		0	0	0	0

TABLE 13 - 87

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

ON SCHEDULE	
N O	
OR	
IN EXTREMIS	(00:
2	PERIO
KILLED	TREATMENT
DEAD,	(TRE
FOUND	
ANIMALS	

52 52 52 52 52 52 52 52 52 52 52 52 52 5		SEX	1 1 1 1	MALE	1 1 1 1 1 1 1		1 1 1 1		1 E		1 1 1 1 1 1 1 1 1 1
CYST	0 8	LEVEL (PPM) : NO. NECROPSIED :	2001	10		1000	252	10		1000	
- 52 15 10 52 50 18 19 +++	SPINAL	(NO. ĘXAMINED) : (52)(15)(10)(52)	51)		19)(52)	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		1)									
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	CYST	1	52	15	10	52	20	18	19	52	
+ + + + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+ :	0 0	0 0	0 0	0 (₩ (0 0	00	00	
- 51 15 10 52 51 18 19 19 19 19 19 19 19 19 19 19 19 19 19		+ + + + + +	00	00	00	00	00	00	00	00	
+ + + + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			7	ر م	,	2,0	n,	ζ	0	c,	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ENCEPHALOMYELIIS	l 1	7 -	<u> </u>	2 0	3 0	30		3 0	1 0	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		+ +	40	0	0	0	0	0		0	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		++++	0	0	0	0	0	0	0	0	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$											
+ + 0 0 0 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1	HEMORRHAGE	ı	55	15	10	20	51	17	18	52	
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+	0	0	0	7	0	Η.	Η.	0	
+++ 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0		++	0	0	0	0	0	0 (0 (0 (
** 52 51 15 8 52 51 18 19 + + 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		++++	0	0	0	, . .	0	0	5	o	
- 51 15 8 52 51 18 19 19 19 19 19 19 19 19 19 19 19 19 19					*						
+ 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	LEUKEMIC EMBOLISM	ı	51	15	8	52	51	18	19	52	
+++ 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+	7	0	7	0	0	0	0	0	
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		++	0	0	₽1	0	0	0	0	0	
- 43 15 2 49 14 18 11 + 9 0 8 3 37 0 8 ++ 0 0 0 0 0 0 0 0 +++ 0 0 0 0 0 0 0 0 0 0 0		++++	0	0	0	0	0	0	0	0	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				•	÷)	34		
+ + + + + + + + + + + + + + + + + + +	NOTHVENUMOTO	ı	27	15	# ○	67	14	18	11	19	
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		+ -	, (o c	o c	n C	, c	o C	c) C	
		++	> 0	> 0	> 0	> 0	o c	o c) c	o c	
		+++	၁	ɔ	5	0	>	>	>	>	

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05 ** P<0.01 *** P<0.001

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TABLE 13 - 88

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NON-NEOPLASTIC FINDINGS

SCHEDULE	
N O	
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KTREMIS	(001
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ILLED	TREATMENT
S FOUND DEAD, K	(TRF/
FOUND	
ANIMALS	

SEX:	SEX :		MALE					FEMALE	L E		
	LEVEL (PPM) : NO. NECROPSIED :	5.2	10	100	1000	! ! ! ! ! !	52	10 10 52	100	1000	
SCIATIC NERVE		52)(16)(10)(52)	V	51)(18)(19)(52)	
DEMYELINIZATION	1 + + + + + + + +	2000	150 0 0 0	10000	S O O O		50 0 1 0	18 0 0	6,000 000	000	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

	PERIOD(MONTHS):		54		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	36		10 100 1000 34 42 34	000 34
ERITONEUM	(NO. EXAMINED) : (1	(1)(0 (0	1)(0)(0)(2)	2)
	1)				
INFLAMMATION		← (0 (0 (
	+ + +	၁င	o c	0 0	
	+++++	0	0	0	
1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODFRAT	1) GRADE : - / NEGATIVE; + / SLIGHT; ++ /	. ω 	DFRAT	'	MODFRATE: +++ . SEVEDE

TABLE 14 - M - 1 - 2

CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

54	0 10 100 1000 36 34 42 34	(36)(0)(0)(34)	8 0 0 3 16 0 0 20 12 0 0 11 0 0 0 0	29 0 0 30 7 0 0 4 0 0 0 0 0 0 0 0	34 0 0 34 2 0 0 0 0 0 0 0 0 0 0 0
PERIOD(MONTHS) :	ORGAN LEVEL (PPM) : FINDINGS NO. NECROPSIED : 3	RT (NO. EXAMINED) :	FIBROSIS + + + + + + + + + + + + + + + + + + +	MIGRATION OF HEMOSIDERIN-LADEN + CELLS +++++++++++++++++++++++++++++++++++	INFILTRATION OF LEUCOCYTES + ++

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS KILLED ON SCHEDULE

	PERIOD(MONTHS):		54		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	. 36	10	10 100 1000 34 42 34	
THYMUS	(NO. EXAMINED) : (34)(0)(0)(34)	: (34)	0 0 0	0)(34)	
		1)			
HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	IAL	- 6	00	0 32	
	+ + + + + +	+ +	00	00	
1) GRADE : - , NEGATIVE; + , SLIGHT; ++ ,	711VE; + / SLIGHT	+ +	MODERAT	MODFRATE: +++ . SEVED	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

	PERIOD(MONTHS):	1	24	24	
		36	10	10 100 1000 34 42 34	.000 34
LYMPH NODES (SUBMAXI.)	(NO. EXAMINED) : (36)(0)(0)(34)	(98):	000	0 0) (34)
		1)			
CYST		- 35	0	0	34
		+	0	0	
	++	0 +	0	0	0
	++	0 +++	0	0	0,
		1	1	1	
1) GRADE : - , NEG	- , NEGATIVE; + , SLIGHT; ++ ,		DERAT	E; ++	ERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

DRGAN FINDINGS NO. NECROPSIED: 36 34 42 34 LYMPH NODES (PULM.HILUS) (NO. EXAMINED): (33)(0)(0)(29) BLOOD ABSORPTION 1) + 7 0 0 15 + 7 0 0 15 + 7 0 0 0 1 + 7 0 0 0		PERIOD(MONTHS) :		54		
(33)(0)(0)(29)) 24 0 0 13 7 0 0 15 2 0 0 1 0 0 0 0	! ! ! !	LEVEL (PPM) : NO. NECROPSIED :	. N .	10	100 1	
24 0 0 13 7 0 0 15 2 0 0 1 0 0 0 0	MPH NODES (PULM.HILUS)	(NO. EXAMINED) :	(33)	0 0	0) (0	. 29)
24 0 0 13 7 0 0 15 2 0 0 1 0 0 0 0			<u> </u>			
2 0 0 15 0 0 0 0	BLOOD ABSORPTION	,	. 24	0	0	13
2 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+	۷ .	0	0	15
0 0 0		+ +	~	0	0	e
		++++	0	0	0	0
			 	1	1	
1) GPADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.	1) GRADE : - , NEGA	TIVE; + , SLIGHT;	++	DERAT	E; ++	1 1 1 1 1 1 1

14 - M - 1 - 6 TABLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

MALE FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

	PERIOD(MONTHS) :		54		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	36	36 34 42 34	100 1000	
LYMPH NODES (MESENT.)	(NO. EXAMINED) :) (98)	36)(0)(0)(34)	0) (3	
	1)				
CYST	1	35	0	0	28
	+	7	0	0	0
	++	0	0	0	0
	++++	0	0	0	0
1) GRADE : - , NE	1) GRADE : - , NEGATIVE; + , SLIGHT; ++	10W / +1	ERATE	+++++++++++++++++++++++++++++++++++++++	/ MODERATE; +++ / SEVERE.

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STUDY	
INHALATION TOXICOLOGICAL	RAT
INHALATION	OF METHANOL IN FISCHER RAT
CHRONIC AND CARCINOGENIC	OF METHANOL
AND	
CHRONIC	

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

N N I N G S	LEVEL (PPM) : NO. NECROPSIED :	0	1	100 1	1 0					
SPLEEN		36	34	7 T	34					
	(NO. EXAMINED) :	(36)	0	0) (0	(34)	! ! ! !	: ! ! ! ! !	: : : : : : : :		
	1)									
CAPSULITIS	l + 4 +	34	000	000	34				•	
	+ + + + +	00	00	00	00					
CONGESTION	1	22	0	0	* 2					
	+ +	10	00	00	٥ /					
	+ + + +	М	0	0	0					
ENLARGEMENT OF FOLLICLE	ı	36	0	0	33					
	+ +	00	00	00	← (
	+ + + +	0	0	0	00					
EXTRAMEDULLARY HEMATOPOIESIS	SI:	12	0	0	11					
	+ +	24	00	00	23					
	+ + +	0	0	00	00					
FAT INFILTRATION	1 +	36	00	00	χ.					
	+ + + + +		000	000	100					

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS KILLED ON SCHEDULE

		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	!	1		STUDY NO. 83004
	PERIOD(MONTHS) :		54			1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	A PS	36	10	100 1	1000	
PLEEN	(CONTINUED) (NO. EXAMINED):) (9£)	0 0	0)(34)	34.)	
	1)					
FIBROSIS	1 +	35	00	00	33 0	,
	+ + + + + + +	00	00	00		
HEMORRHAGE	1 +	\$ 0 0	00	00	34	
	* * * * * * * * * * * * * * * * * * *	0 4	000	000	000	
HEMOSIDEROSIS	1 -	4 (0 (0 (2 2	
	* * * *	† 8 O	000	000	50 2 0	
NECROSIS	1	. 35	0	0	34	
	+ + + + + + + +	00 H	000	000	. 0	
PROLIFERATION OF RETICULAR CELLS	RETICULAR CELLS -	36	0	0	23	
	+ +	00	00	00	0 1	
	++++	0	0	0	0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

54

PERIOD(MONTHS):

STUDY NO. 83004

	•		1 1 1		111111111111111111111111111111111111111	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	36	10 34	10 100 1000 34 42 34	1000 34	
SPLEEN	CONTINUED) (CONTINUED) (CONTINUED) (CONTINUED) (CONTINUED) (CONTINUED) (CONTINUED) (CONTINUED) (CONTINUED)	(36) ()(0)(9	0) (0		i i i
	1)					
RUPTURE	ı	35	0	0	34	
	+	0	0	0	0	
	+ + +	7	0	0	0	
	+++	0	0	0	0	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1		1		

- ' NEGATIVE; + ' SLIGHT; ++ ' MODERATE; +++ ' SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

MALE FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

	1000	34)		*	33	1	0	0	12	22	0	0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	100 1000	0)(34)			0	0	0	0	0	0	0	0	; ; ;
54	10	0) (0			0	0	0	0	0	0	0	0	! ! !
	36	(36)(59	Ŋ	2	0	ω	28	0	0	1
PERIOD(MONTHS):	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINED) : (3	1)		IESIS	+	++	+ + + +	I	+	+++	+ + + +	
	ORGAN	BONE MARROW			ACTIVATION OF HEMATOPOIESIS				OSTEOGENESIS				

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY	OF METHANOL IN FISCHER RAT
CARCINOGENIC	OF METHANOL
CHRONIC AND	

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

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STUDY	
ARCINOGENIC INHALATION TOXICOLOGICAL STUDY	RAT
INHALATION	IN FISCHER
CHRONIC AND CARCINOGENIC	OF METHANOL
NIC AND	
CHRO	

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

	PERIOD (MONTHS)	••		5.4			
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		36	10	100 1	1000 34	,
LARYNGOPHARYNX	(NO. EXAMINED)		36)(0) (0	0)(34)	34)	
		1)					
CYSTIC DILATATION OF GLAND	F GLAND	ı	23	0	0	24	
		+	13	0	0	10	
		++	0	0	0	0	
	*	+ + +	0	0	0	0	
INFILTRATION OF LEUCOCYTES	COCYTES	ı	35	0	o	33	
		4		· C	· c) -	
		+	. 0	0	0	1 0	
	+	+ + +	0	0	0	0	
INFLAMMATION		1	36	0	0	33	
		.+	0	0	0	.	
		++	0	0	0	0	
	+	+++	0	0	0	0	

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ARCINOGENIC INHALATION TOXICOLOGICAL	TVG
INHALATION 1	IN FISCHED
CHRONIC AND CARCINOGENIC	OF METHANO!
AND	
CHRONIC	

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

	1000	34)		33	~	0	0	34	0	0	0		, SEVERE.
	100 1000	0)(34)		0	0	0	0	0	0	0	0	!	+++
54	10)(0)(9)		0	0	0	0	0	0	0	0	!	MODERATE;
	36	(38)		31	Ŋ	0	0	35	↤	0	0	1	
PERIOD(MONTHS):	L (PPM) : NECROPSIED :	(NO. EXAMINED) :	1)	I	+	++	+ + +	1	+	++	++++		- , NEGATIVE; + , SLIGHT; ++ ,
PER	SDNIC			CYSTIC DILATATION OF GLAND				INFILTRATION OF LEUCOCYTES					1) GRADE : - , NEGATIVE;
	ORGAN	TRACHEA		CYST				INFIL				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1

			;	SIUDY NO. 83004																		
		MALE																				
TABLE 14 - M - 1 - 14	CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT	DISTRIBUTION OF NON-NEOPLASTIC FINDINGS	ANIMALS KILLED ON SCHEDULE		1000)(34)		33	100	75	00	0	34	00	0	M	31	00		33		0
_		AND	ANI	24	0 100	34)(45)(00		00			0 -				00		42	00	0
	NIC AND	QUENCY		!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	0 10	36) (34			00		0 0			00				00		5 34		
	CHRONI	FREQU					1)	1 +		l -										. 35		
				PERIOD(MONTHS)	LEVEL (PPM) NO. NECROPSIED	(NO. EXAMINED)			+ + + + + + + + + + + + + + + + + + + +		+ +	++++	•	+ + +	+ + + +	N OF VASCULAR WALL	+ -	+ + + + +		INFILTRATION OF LEUCOCYTES +	+	+++
				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ORGAN FINDINGS	רחאפ		ADENOMATOSIS		ALVEOLAR BRONCHITIS			ALVEOLITIS			CALCIFICATION			1	INFILTRATION		

1) GPADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

	PERIOD(MONTHS):	ı	! ! ! !		24	
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		36	10	100 1000	 000 34
רחאפ	(CONTINUED) (NO. EXAMINED):		36) (36)(34)(42)(34)	42)(34)
		1)				
OSSEOUS TISSUE		ı		33	41	
		+	7	⊣		
	•	++		0		0
	÷	+ + +		0		0
avia ac anti-iana	MILLIANS OF ALVESTA	ı	7.2	, ,	ć	
		٠ +	าพ	† O	, 0	35
	T	+	0	0	0	0
	+	+ + +	0	0	0	0

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

PERIOD(MONTHS):	PERIOD(M	PERIOD(MONTHS):	; 1 1 1 1	24	24	
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED	PPM)	36	10	0 10 100 1000 6 34 42 34	1000 34
STOMACH	(NO. EXA	(NO. EXAMINED) : (36)(0)(0)(34)	(38)	6	6	(34)
		1)	_			
INFILTRATION OF LEUCOCYTES	YTES	1 +	36	00	00	33
		- +	0	0	0	٠ 0
		++++	0	0	0	0
	1	 	1	1 1	1	
1) GRADE: - NEGA	- , NEGATIVE; + , SLIGHT; ++ ,	SLIGHT;		DERA	E; ++	MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

	34	34)		32	2	0	0	33	7	0	0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	100 1000	36)(0)(0)(34)		0	0	0	0	0	0	0	0	!
54	10	6		0	0	0	0	0	0	0	0	1
	36	(36)		33	M	0	0	36	0	0	0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
PERIOD(MONTHS) :	(PPM) : ECROPSIED :	(NO. EXAMINED) :	1)	i	+	+++	++++	I	+	++	++++	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
PERI	ORGAN LEVEL FINDINGS NO. NO.	SUBLINGUAL GLANDS (NO.		INFILTRATION OF LEUCOCYTES				PROLIFERATION OF DUCT				

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CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED : 3	001	10 1	10 100 1000 34 42 34
PAROTID GLANDS	(NO. EXAMINED): (36)(0)(0)(34)	(36)(0 0	6
	1	1)		
INFILTRATION OF LEUCOCYTES	COCYTES -	34	0	0 34
	+	5	0	0
	++	0	0	0
	+ + + +	0	0	0

TABLE 14 - M - 1 - 19

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

		1 6	1		!		STUDY NO. 83004
	PERIOD (MONIHS)	. (SF	1	24			
ORGAN FIMDINGS	LEVEL (PPM) NO. NECROPSIED	IED :	36	10 1	100 1	1000 34	
LIVER	(NO. EXAMINED)	: (0:	(36)(0) (0	0	34)	
		1)					
ANGIECTASIA		I +	31	00	00	29 5	
		+ + + + + +	0 13	00	00	0 0	
CHOLANGIOFIBROSIS		ı	33	0	0	7 8	
		+ +	MC	00	00	.00	
		+ + +	0	0	0	000	
EXTRAMEDULLARY HEMATOPOIESIS	OPOIESIS	ı	34	0	0	53.3	·
		+	2	0	0	FI.	
		+ + + + +	00	00	00	· •	
FATTY DEGENERATION OF HEPATIC CELLS	F HEPATIC CELLS	ı	М	0	0		
		+ +	28	00	00	28 7	
		+ + + +	0	0	0		
FOCAL ATROPHY OF HEP.	HEPATIC CELLS	. ,	12	0	0	14	
		+ :	.24	0 0	0 0	20	
		+ + + + +	0 0	00	00	0 0	
•				,	,	•	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

	STUDY -	
- 20	TOXICOLOGICAL	RAT
14 - M - 1 - 20	INHALATION	IN FISCHER
TABLE	CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL	OF METHANOL IN FISCHER RAT
	AND	
	CHRONIC	

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FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE ANIMALS KILLED ON SCHEDULE

							STUDY NO. 83004
	D (M 0	: : ••		54	! ! !	1	
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED	ED :	36	10	100 1	1000 34	
CLIVER	(CONTINUED) (NO. EXAMINED)		(36)(0 6) (0	34)	
		1)					
GRANULATION		1 4	32	0 0	0 0	2	
		+ + +	v	000	000	0 0	
MIGRATION OF HEMOSIDERIN-LADEN	ERIN-LADEN	1 +	35	00	00	7.0	
		· +	-10	0	0		
		+ + +	0	0	0		
HYPERPLASTIC NODULE		1	7.1	c	c	22	
		+	, r	0	0	7	
		++	0	0	0	. 0	
		+ + +	0	0	0	0	-
	1				,		
INFILIKATION OF LEUCOCYTES	CYLES	1	4 (0 (0	9	
		+	32	0	0	28	
		+ +	0	0	0	0	
		+ + +	0	0	0	0	
PROLIFERATION OF BILE DUCT	DUCT	1	.34	0	0	32	
		+	~	0	0	2	
		++	7	0	0	. 0	
		++++	0	0	0	0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

	PERIOD(MONTHS):	! ! ••	! ! ! ! !	24	! ! !	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !
ORGAN FINDINGS	LEVEL (PPM NO. NECROP		36	10 34	100 1000	000 34
LIVER	(CONTINUED) (NO. EXAMINED) :	1	(36)(0 0	0)(34)	34)
		1				
PROLIFERATION OF BILE DUCT	DUCT	1	١٠.	0	0	m į
WILH FIBROSIS		+ +	19 11	00	00	27 4 4
	+.	+ + +	₽	0	0	0
						**
SMALL GRANULOMA		1	18	0	0	2
		+	16	0	0	24
		+	2	0	0	N
	+	+ + +	0	0	0	0
SWELLING OF KUPFFER CELLS	٦٢٥	i	35	0	0	34
		+	~	0	0	0
	•	++	0	0	0	0
	÷	+ + +	0	0	0	0
		i	1	1	1	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

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TABLE 14 - M - 1 - 22	CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT	FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS
TABLE	CHRONIC AND CARCINOGENIC OF METHANOL	FREQUENCY AND DISTRIBUTI
	-	

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ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

MALE

	PERIOD(MONTHS):	 	24	! ! !		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	36	10	100 1000 42 34	1	
PANCPEAS	. EXAMIN) (9£)	0 (0	0)(34)		
	1)					
ATROPHY OF PANCREATIC ACINUS	ACINUS + + + + + + + + + + + + + + + + + + +	14 15 7	0000	0000	20 7 6 1	
FIBROSIS	1 + + + + + + + + +	. 33 2 0	0000	0000	۵. 0 0	
HYPERPLASTIC NODULE	+ + + + + +	% 0 0 0 M	0000	0000	33 0 1 0	
INFILTRATION OF LEUCOCYTES	/TES + + + + + + + + + + + + + + + + + + +	32 4 0 0	0000	0000		

1) GRADE : - / NEGATIVE; + / SLIGHT; ++ / MODERATE; +++ / SEVERE.

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TOXICOLOGICAL	FAT
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CHRONIC AND CARCINOGENIC I	OF METHANOL
AND	
CHRONIC	

ANIMALS KILLED ON SCHEDULE

		1 1 1 1 1 1	1 1	1	1	
	PERIOD(MONTHS):	! ! ! !	24	1	! ! !	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	36	10	100	1000	
KIDNEYS	(NO. EXAMINED) :	(36)	(34)	34)(45)(34)	(34)	
	1)	_				
CALCIFICATION	1 + 1	34	34	700	W H C	
	- + - + +		0	0	0	
		•	* (* *	•	
CHKUNIC PROGRESSIVE GLOMERULONEPHROPATHY	1 +	1 24	11	19	0 5 8	
	++	10	18	16	5	
	+ + + +		w	2	м	
CYST	ı	36	33	75	34	
	+	0	7	0	0	
	+ + + + + +	00	00	00	00	
FIBROSIS	1 -	36	34	41	34	
	+ +	00	0	> ←	0	
	++++	0	0	0	0	
INFILTRATION OF LEUCOCYTES		7 26	30	30	22	
	+ + + + + +	м 0	0 0	1	7 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. ** P<0.01

TABLE 14 - M - 1 - 24 CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT			
TABLE 14 - M - 1 - 24 CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL OF METHANOL IN FISCHER RAT		STUDY	
TABLE 14 - M - 1 CHRONIC AND CARCINOGENIC INHALATION OF METHANOL IN FISCHER	- 54	TOXICOLOGICAL	RAT
TABLE CHRONIC AND CARCINOGENIC OF METHANOL	14 - M - 1	INHALATION	. IN FISCHER
CHRONIC AND	TABLE	CARCINOGENIC	OF METHANOL
CHRONIC		AND	
		CHRONIC	

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FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

MALE

.STUDY NO. 83004 1) GRADE: - . NEGATIVE; + . SLIGHT; ++ . MODERATE; +++ . SEVERE. ** P<0.01 (NO. EXAMINED) : (36)(34)(42)(34) 10 100 1000 34 42 34 34 34 1) LEVEL (PPM) : NO. NECROPSIED : PERIOD(MONTHS) : (CONTINUED) PIGMENTATION ORGAN FINDINGS NECROSIS KIDNEYS

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

MALE FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

		36)(0)(0)(34)			0					0		
24		0) (0					0		
1 2	10 34	0) (9			0					0		
; ; ;	36	36	•	3,5	1	0	0	36	0	0	0	
PERIOD(MONTHS) :	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINED) :	F	I		++	++++	1	+	++	+++	
PER	LEVE			COAGULATIVE				INFILTRATION OF LEUCOCYTES				
	ORGAN FINDINGS	URINARY BLADDER		EOSINOPHILIC COAGULATIVE	SUBSTANCE			INFILTRATION				

- , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. 1) GRADE :

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS KILLED ON SCHEDULE

	PERIOD(MONTHS) :		54			
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	38	10 1	100 1	1000	
TESTES	(NO. EXAMINED) :	(36)() (0	0) (0	34)	
	1)					
ATROPHY		31	0	0	33	
	+ :	4 ,	0 (0	0	
	++	- 1 1	0	0	0	
	+ + +	0	0	0	€'	
CALCIFICATION	ı	35	0	0	34	
	+	1	0	0	0	
	++.	0	0	0	0	
	++++	0	0	0	. 0	
					**	
HYPERPLASIA OF LEYDIG CELLS		36	0	0	59	
	+	0	0	0	7	
	+++	0	0	0	₽.	
	++++	0	0	0	0	
•						
PERIVASCULITIS	•	34	0	0	34	
	+	1	0	0	0	
	++	₽	0	0	0	
	++++	0	0	0	0	

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

1	PERIOD(MONTHS):		! ! ! ! !	24	! !	i I I I I	
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED	!	36	10 134	100 1000	34	
PROSTATIC GLAND	EXAMIN) (9£)) (0	0)(34)	34)	
		1)					
ATROPHY		1	35	0	0	33	
		+ +	۰ 0	00	00	٥ ب	
	+	+ + +	0	0	0	0	
FIBROSIS		ı	36	0	0	33	
		+	0	0	0	~1	
	+	+ + + +	0 0	0 0	00	00	
	•		>)	>	o	
HYPERPLASIA OF MUCOSAL EPITHELIUM	EPITHELIUM	ı	29	0	0	28	
	•	+	7	0	0	9	
		++	0	0	0	0	-
	+	+ + +	0	0	0	0	
INFLAMMATION		ı	25	0	0	19	
		+	6	0	0	13	
		++	2	0	0	 1	
	+	++++	0	0	0	7	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - M - 1 - 28.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

	STUDY
14 - M - 1 - 29	INHALATION TOXICOLOGICAL IN FISCHER RAT
TABLE	CARCINOGENIC OF METHANOL
	AND
	CHRONIC

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FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

	PERIOD(MONTHS) :		54		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		10	0 10 100 1000 36 34 42 34	
BULBOURETHRAL GLAND	(NO. EXAMINED) :	(1)(0)(0)(0)) (0) (0	
	1)	^			
CONGESTION	1 -	o , : :	0		0:
	+ + +	-1 0	00	00	
	++++	0	0	0	0
			! ! !	 	
1) GRADE : - / NE	- , NEGATIVE; + , SLIGHT; +	++ MO	DERAT	+++ /3	SEVERE.

		MALE	STUDY NO. 83004	1				
TABLE 14 - M - 1 - 30	CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT	FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS	ANIMALS KILLED ON SCHEDULE		LEVEL (PPM) : 0 10 100 1000 NO. NECROPSIED : 36 34 42 34	(NO. EXAMINED) : (35)(0)(0)(32)	1)	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
					ORGAN FINDINGS	PITUITARY GLAND		CYST

Ti.

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

MIGRATION OF HEMOSIDERIN-LADEN CELLS

HEMORRHAGE

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TABLE	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

24	0 10 100 1000 34 42 34	(9)(0)(34)		0 0 9	0 0	. 0 0 0 0	0	0	3000 8		
PERIOD(MONTHS) :	LEVEL (PPM) : NO. NECROPSIED : 3		1)		+	++	++++		+	++	++++
	ORGAN FINDINGS	THYROID GLANDS		CYST				HYPERPLASIA OF C-CELLS			

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

	STUDY
- 32	INHALATION TOXICOLOGICAL IN FISCHER RAT
14 - M - 1	INHALATION IN FISCHER
TABLE	CARCINOGENIC INHALATION TO OF METHANOL IN FISCHER
	AND
	CHRONIC

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FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

						STUDY NO. 83004
	HS)		54	: : :		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	36	10	100 1	1000	
ADRENAL GLANDS	(NO. EXAMINED) :	(36)(0 (0	0) (0	34)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	1)					
HYPERPLASIA OF MEDULLARY CELLS	RY CELLS + + + + + + + + + + + + + + + + + +	% 000 000	0000	0000	32 1 0	
HYPERPLASTIC NODULE	1 + + + + + +	34 2 0 0	0000	0000	34 0 0 0	
INFILTRATION OF LEUCOCYTES		34 0 0	0000	0000	34 0 0 0	
NECROSIS	! + + + + + + +	90 . 0 .	0000	0000	33 0 .0 1	
PIGMENTATION	+ + + + + +	8 0 0	0000	0000	34 0 0 0	

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

- 33	INHALATION TOXICOLOGICAL STUDY IN FISCHER RAT
14 - M - 1	INHALATION IN FISCHER
TABLE	CARCINOGENIC OF METHANOL
	AND
	CHRONIC AND

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS
ANIMALS KILLED ON SCHEDULE

MALE

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STUDY NO. 83004 - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. LEVEL (PPM) : 0 10 100 1000 NO. NECROPSIED : 36 34 42 34 (CONTINUED) (CONTINUED) : (36)(0)(34) PERIOD(MONTHS): VACUOLAR DEGENERATION OF CORTICAL CELLS 1) GRADE: ADRENAL GLANDS ORGAN FINDINGS

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

	100 1000 42 34	0)(34)		0 34							0 1	0 0
54	36 34	36)(0)(0)(34)		35 0		1 0			54 0		. 1 0	0
PERIOD(MONTHS) :	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINED) : (1)	ı	+	++	+++++		1	+	++	++++
	ORGAN FINDINGS	SKIN		FOLLICULITIS				2	NEX			

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

					STUDY NO. RECOL
	PERIOD(MONTHS):		24		
ORGAN FINDINGS		0 10	100	1000 34	
S)		(36)(0)(0)(34))(0)(0	(34)	
	1)				
INFLAMMATION	ı	35 0		34	
	+	1 0	0	0	
	++	0	0		
	++++	0	0	0	
1) GRADE - MEGALTON	1) CPANE		; ; ; ;		

- , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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ARCINOGENIC INHALATION TOXICOLOGICAL	. LVQ
INHALATION	TN FISCHED
\circ	OF METHANOL
AND	
CHRONIC	

ANIMALS KILLED ON SCHEDULE

					S	STUDY NO. 83004
	PERIOD(MONTHS):	! ! ! !	24		1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	36	10 100 1000 34 42 34	100 1000 42 34		
MAMMARY GLAND	(NO. EXAMINED) :		36)(0)(0)(34)) (34)		
	1).					
DILATATION OF GLAND	t	30	0	30		
	+ +	90	00			
	++++	0	0	0		
1) GRADE: - NEG	1) GRADE : - , NEGATIVE; + , SLIGHT; ++	1	RATE	. MODERATE; +++ , SEVERE.		

	STUDY
- M - 1 - 37	NHALATION TOXICOLOGICAL IN FISCHER RAT
14 - N	
TABLE	CARCINOGENIC OF METHANOL
	AND
	CHRONIC
	СН

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

	100 1000	36)(0)(0)(34)			0 1		0			0 0	
	36 34	(36)(0)(0				1 0		1 0
PERIOD(MONTHS):	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINED) : (1)	1	+	+++	++++	1	+	++	+ + +
	ORGAN FINDINGS	EYE BALLS		CALCIFICATION, SCLERA				CATARACT			

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

	OF LEUCOCYTES	+ +	IAN GLANDS (NO. EXAMINED) : (36)(0)(34)	0 I N G S	STUDY NO. 83004	\$6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	RIOD(MONTHS) :: VEL (PPPM) :: NECROPSIED :: NECRAMINED) :: + + + + + + + + + + + + + + + + + +	ORGAN FINDINGS HARDERIAN GLANDS HYPERSECRETION INFILTRATION OF LEUCOC
PERIOD(MONTHS): LEVEL (PPM): NO. MECROPSIED: 36 34 42 42 42 42 42 43 42 44 10 0 0	PERIOD(MONTHS): 24 LEVEL (PPM): 0 10 100 10 NO. NECROPSIED: 36 34 42 (NO. EXAMINED): (36)(0)(0)(1) + 1 0 0 + + 0 0 0 + + + 0 0 0	LEVEL (PPM) : 0 10 10 10 NO. NECROPSIED : 36 34 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	PERIOD(MONTHS): 24 LEVEL (PPM): 0 10 100 DINGS NO. NECROPSIED: 36 34 42		0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

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MALE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

14 - M - 1 - 38

TABLE

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

.STUDY NO. 83004

	100 1000	(0)(34)		0 34	0 0	0 0	0	0 13	0 21	0 0	0 0	
54	36 34	(36)(0)		32 0	3	1 0	0	10 0	26 0	0	0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
PERIOD(MONTHS) :	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINED): (36)(0)(0)(34)	1)	L VENTRICLE -	+	+++	+ + +	1	+	++	+++++	
	ORGAN FINDINGS	E R A		DILATATION OF CEREBRAL VENTRICLE				PIGMENTATION				

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

	PERIOD(MONTHS):		54		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	36	10 100 1000 34 42 34	00 1000 42 34	34
SPINAL CORD	(NO. EXAMINED) :	i	36)(0)(0)(34)) (0	(34)
	1)				
PIGMENTATION	ı	27	0	0	3.1
	+	6	0	0	m
	++	0	0	0	0
	+ + + +	0	0	0	
	•				
	1) GPADE: - , NEGATIVE; + , SLIGHT; ++		. MODERATE; +++	+++	/ MODERATE: +++ / SEVERE.

TABLE 14 - M - 2 - 1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

ANIMALS FOUND DEAD OR KILLED IN <u>EXTREMIS</u>

STUDY NO. 83004

	PERIOD(DAYS) :		1-364	4		M	65-54	365-546		2	47-73	547-736		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	! !	100	0 10 100 1000 2 0 0 1	1	0 1	10 1	0 10 100 1000 1 5 5 0	000	0 10 100 1000 13 13 5 17	10 1 13	00 10	00	
PERITONEUM		J	0 (0	(0)(0))(0)(0	6	(0)(0)(1)(0)	0)(1)	1)(0)	(1)(1)(2)(1)	1) (2) (2	1)	
	1)													
HEMORRHAGE	1	0	0		0				0	€	-	1 2 1		
	+	0	0	0	0	0	0	0	0	0		. 0	10	
	+++	0	0		0				0	0	0	0	0.	
	+ + +	0	0		0				0	0		0	0	

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - M - 2 - 2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

MALE

	PERIOD(DAYS,) :		1-364	24			365-546	246			247-7	547-736	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 8	10	10 100 1000	000	10 1	10 10	100	1000	13	10 13	0 10 100 1000 13 13 5 17	00
DIAPHRAGM	(NO. EXAMINED) : (6	(0) (0) (0) (0)	(0		(0)	(0) (0) (1) (0)	(0	(0)(0)(0)(0)	3 60) (0	(0)
	1)												
HEMORRHAGE	ı	0	0	0	0	0	0	0	0	c	c	c	c
	+	0	0	0	0	0	0	0	0	0	· o c	o c	o c
	++	0	0	0	0	0	0	0	0	0	0	· c	o c
	+ + + +	0	0	0	0	0	0		0	0	0	0	0

TABLE 14 - M - 2 - 3

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

MALE
FINDINGS
FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS
0 F
DISTRIBUTION
AND
FREQUENCY

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1		!	! ! !	; ; ;	1					STUDY NO. 83	83004
	PERIOD(DAYS):	! ! ! !	1-364	54			365-546	979			547-736	36	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	1 1 1 1
ORGAV FILDINGS	L (PPM) : NECROPSIED :		10	100 1	1000	101	10	100 1	1000	13	10 13	100	1000	
e. F		(5)) (0)	0 0 0	1)	(1)) (5)	5) (5	0)	(13)((13) (5) (5		
	1)													
FIBROSIS	+ + + + + + +	000	0000	0000	1000	0040	0 M N O	* 0 50 0 0	0000	мючч	m ~ m o	2210	4040	
MIGRATION OF HEMOSIDERIN-LADEN CELLS	N-LADEN + + + + + + + + + + + + + + + + + + +	NC00	0000	0000	4000	1000	M N O O	w000	0000	10 0 0	10 8 0	w000	* ⁷ 0 0 0	
HEMORRHAGE	1 + + + + + + +	0000	0000	0000	4000	4000	7 1 0 0	v000	0000	13 0 0	113	 	17. 0 0	
MYOCARDITIS	1 + + + + + + + + + + + + + + + + + + +	0000	0000	0000	1000	. 0 0 0	w000	v 0 0 0	0000	12 1 0	13	v 0 0 0	177 0 0	
THROMBOSIS	1 + + + + + + + +	0000	0000	0000		4000	v000	w o o o	0000	13 0 0	12 0 1	v 0 0 0		

1) GRADE: - / NEGATIVE; + / SLIGHT; ++ / MODERATE; +++ / SEVERE.

14 - M - 2 - 4TABLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

MALE FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

1) GRADE: --, NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

TABLE 14 - M - 2 - 5

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF METHANOL IN FISCHER RAT

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

MALE

DRGAN FINDINGS NO. NECROPSIED:	••	1-364		365-546	547-736	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
CCYTES ++++++++++++++++++++++++++++++++++++	0	10	100 1000	0 10 100 1000 1 5 5 0	13	! ! ! ! ! ! ! ! ! !
+ + + +	: (1)() (0	0)(1)	(1)(3)(5)(0)) (13)(13)(5)(17)	
+	1)	0000	0000	000000000000000000000000000000000000000	13 13 5 16 0 0 0 1 0 0 0 0	
+ + + +		0000		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	13 11 5 17 0 2 0 0 0 0 0 0 0 0 0	
+ + + + + +	1 + + + + 0 0 0 11	0000	0 0 0 0	1000 0000 0000	12 13 5 17 1 0 0 0 0 0 0 0 0 0 0 0	
FOAMY CELLS ++++++	1 + + + + 0 0 0 11	0000	0000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	13 12 5 17 0 1 0 0 0 0 0 0 0 0 0 0	

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - M - 2 - 6

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

MALE

ANIMALS FOUND DEAD OR KILLED IN <u>EXTREMIS</u>

ORGAN FINDINGS LEVEL (PPM) NO. NECROPSIED LYMPH NODES (PULM.HILUS) (NO. EXAMINED) BLCOD ABSORPTION INCREASE OF PLASMA CELLS	, , , , , , , , , , , , , , , , , , , ,					
ORGAN FINDINGS NO. NECROP NO. NECROP THE NODES (PULM.HILUS) (NO. EXAMI BLCOD ABSORPTION INCREASE OF PLASMA CELLS) AYS) :	! !	1-364	365-546	547-736	
JYMPH NODES (PULM.HILUS) (NO. EXAMI BLCOD ABSORPTION INCREASE OF PLASMA CELLS		! !	10 100 1000	0 10 100 1000 1 5 5 0	0 10 100 1000 13 13 5 17	
BLCOD ABSORPTION INCREASE OF PLASMA CELLS	<u> </u>	0) (0	0)(0)(1)	(1)(3)(5)(0)	(8)(9)(3)(15)	
INCREASE OF PLASMA CELLS	1 + + + + + + + + .	0000	0000	1 2 4 0 0 1 0 0 0 1 0 0 1 0 0 0	6 6 7 10 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
		0 0 0 0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8 8 3 15 0 1 0 0 0 0 0 0 0 0 0 0	
PROLIFERATION OF RETICULAR CELLS	1 + + +	0000	0000	1 0 0 0 0 0 0 0	7 9 3 15 1 0 0 0 0 0 0 0 0 0 0 0	

1) GPADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - M - 2 - 7

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

	PERIOD(DAYS) :		-	1-364				3 7 2	775-572				6/3	724-613		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		1	1					, 1	1				÷ `	0		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	9 0	i	10	10 100 1000 0 0 1	04	101	10	10	10 100 1000 5 5 0	! ! 0 0	13		10 100 1000 13 5 17	1000	
LYMPH NODES (MESENT.)	(NO. EXAMINED) : (0) (2)(0)(0)(1)	1)	(1)() (3)(5)(ł	(0	(13)	(13) (12) (5) (17)	2) () (17	
	1)															
ANGIECTASIA	ı	2				€1	₩.				c	7				
	+	0	_			0	0				c	C				
	+++	0	0		0	0	0				. 0	0				
	+ + + +	0				0	0	0		.0	0	0	0	0	0	
BLOOD ABSORPTION	1 -	~ .	00			₩ (₩.	M	5		0	13	11		17	
	+ +					o c	o c				0 (0.0		0 0		
	++++	0				0	0) C	> <				

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

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4000
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0000
0000
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HEMORRHAGE

1) GRADE : - / NEGATIVE; + / SLIGHT; ++ / MODERATE; +++ / SEVERE.

TABLE 14 - M - 2 - 9

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

	!		!																	
83004	! ! !		 																	
NO. 8	! ! !		!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!																	
STUDY																•				
ST	! ! !	1000	(17)		^	S	M	2	16	0	۲-4	0	7.	0	2	0	16	0 +	- 0	
	736	100			4	0	0	0	7	0	0	0	7	0	0	0	7	0 0	0	
	547-736	10	(13) (Ŋ	7	← (0	13	0	0	0	13	0	0	0	13	0 0	0	
	: : : :	13	13) (Ŋ	М	M (7	13	0	0	0	12	 	0	0	13	0 0	0	
	! ! !	i																		
2	1 1 1 1	1000	6		0	0	0 0	o	0	0	0	0	0	0	0	0	0	0 0	0	
	46	100 1) (5.		5	0	0 0	>	72	0	0	0	'n	0	0	0	5	0 0	0	
1	365-546	10	5) (5		2	~	c	>	Ŋ	0	0	0	Ŋ	0	0	0	2	00	0	
		101	1) (H	0	o c	>	₩	0	0	0	~	0	0	0	-	0 0	0	
		: 																		
		1000	1)		0	₩.	5 C	>	~	0	0	0	↔	0	0	0	7	00	0	
1		100 10	0 (0		0	0 0	o c	>	0	0	0	0	0	0	0	0	0	o c	0	
	1-364	10 1	0 (0		0	0 0	o c	•	0	0	0	0	0	0	0	0	0)	0	
 	 	0 %	2) (2		0	۰ ,	٦ -	4	2	0	0	0	2	0	0	0	2 (o c	0	
1				1)		.			ı	_	_									
.!	^	SIED	(ED)	•	•	+ -	+ +		,	+	++	+ + +	ı	+	++	+++	1	+ +	++++	
!	PERIOD(DAYS	LEVEL (PPM) NO. NECROPSIED	EXAMINED)										LS							
	ERIOC	LEVEL NO. NE											R CEL							
1	а.		Z										RETICULAR CELLS							
1			00)																	
1 1 1		! ! !			SIS								O NO							
1		GAN FINDINGS			DERO				SIS				ERATI				ш			
1		o≃ 1	SPLEEN		HEMOSIDEROSIS				NECROSIS				PROLIFERATION OF				RUPTURE			
1		0 1	SPL		Æ				2				Δ.				œ			

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

99	10 100 1000 13 5 17	5)(17)	34 34	1 13				**	5. 6	0. 10	0 . 1	0
547-736	0 10 100 13 13 5	(13)(12)(5)(17)		8 5	7	2	₽		6	M	0	Ö
	1000	(0)		0	0	0	0				0	
365-546	0 10 100 1000 1 5 5 0	3)(4)(1 2		1					0	
36	101	(1)(3)(₽					0	
	000	1)		0	0	1	0		+	0	0	0
1-364	10 100 1000) (0)		0	0	0	0		0	0	0	0
1-3	! ! ! !	2)(0)(0	0		0	0	0	0
	0 2 1	7		2	0	0	0		2	0	0	0
PERIOD(DAYS):	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINED) :	1)	- 81	+	++	+ + + +		1	+	++	++++
P.	C C C C C C C C C C	5		ACTIVATION OF HEMATOPOIESIS								
	ORGAN FINDINGS	BONE MARROW		ACTIVATION OF					OSTEOGENESIS			

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05 ** P<0.01

14 - M - 2 - 11 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004	1-3	0 10 100 1000 0 10 100 1000 0 10 100 10	2)(0)(0)(1) (1)(3)(4)(0) (13)(11)(5)(17)		3 4 0 13 11 4	000						···· * * * * * * * * * * * * * * * * *	0 0 0 1 2 1 0 11 3 1			0 0 1 1 3 3 0 13 11 3		
)00 0 10 1 1 5	0)(1) (1)(3)(T (000	0 0		1 0 0 0 0 0	0 0 0	0 0 0	0	0 1 2	10000		1 1 3		
	1-3	2 0	: (2)(1)		0			10	0			स्त		,			
	PERIOD(DAYS	LEVEL (PPM) NO. NECROPSIED	(NO. EXAMINED)									INFILTRATION OF LEUCOCYTES						
		ORGAN FINDINGS	NASAL CAVITY		CONGESTION			HEMORRHAGE				INFILTRATION				INFLAMMATION		

- , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. ** P<0.01 1) GRADE : * P<0.05

TABLE 14 - M - 2 - 12

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

ANIMALS FOUND DEAD OR KILLED IN <u>EXTREMIS</u>

		1	! ! !	1	1 1 1	1	1			1	 		STUDY NO. 83004	,
	PERIOD(DAYS):	; ; ; ;	1-364	! !	1	נק	365-546	9			547-736	36		ı
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 8	10	10 100 1000 0 0 1	000	1	10 1	100 1000	! ! 00 ! 0	13	10	100 1000	000 17	
LARYNGOPHARYNX	(NO. EXAMINED) :)(2)	0 0	0 (0	1)	(1)(3) (5) (0	(13)	(13)(13)(5) (17)	1
CYSTIC DILATATION OF GLAND	- + + + + + + + + + + + + + + + + + + +	0000	0000	0000	1000	4000	m000	w000	0000	0400	10 3 0	w000	14 3 0 0	
HEMORRHAGE	1 + + + + + + + + +	N O O O	0000	0000	0 0 1 0	1000	m000	4400	0000	13 0 0	13 0 0	v o o o	17 0 0	
HYPERSECRETION	1 + + + + + + + + + + + + + + + + + + +	0000	0000	0000	4000	1000	m000.	7100	0000	13 0 0	113	w 0 0 0	17 0 0 .0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - M - 2 - 13

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

	PERIOD(DAYS):	 	1-364		365-546	547-736
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 0	10	l .	0 10 100 1000 1 5 5 0	0 10 100 1000 13 13 5 17
TRACHEA	(NO. EXAMINED) :) (0	2)(0)(0)(1)	(1)(3)(5)(0)	(13)(13)(5)(17)
	1)					
CYSTIC DILATATION OF GLAND		~ <	00		rv (13 5
	+ + + + + +		000			1 0 0 0 0 0 0 0 0
		1 1 1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - M - 2 - 14

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

	PERIOD(DAYS) :		1-3	-364			365-546	46			547-736	!	S1001 NO. 83004	1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 8	10	100	1000	0 1	10	100 1	1000	13	10 13	100 1	1000	
רחאפ	(NO. EXAMINED) :	(5)	60	6	(1)	(1)(7 (7	5)(6	(13)	13)(12)(5) (5	17)	! !
	1)													
ADENOMATOSIS	1 +	~ 0	00	00	₩ (₩ (40	ıς	0 0	13	12	7	14	
	+ + + + + +		000	000		000	000	000	000	000	000	0 -1 0	0 2 1	
		••												
ALVEOLITIS	1 +	∾ o	00	00	. 0	с 1 С	40	w c	00	12	12	v c	17	
	+ + + + + +	00	00	00	000	000	000	000	000	- 0 0	000	000	D 0 C	
										•)	•	•	
ANEMIA	1 +	00	00	00	10	t 0	4 0	v 0	00	12	12	v c	16	
	+ + + + + +	00	00	00	00	00	00	00	.00	100	000	000	100	
CALCIFICATION OF VASCULAR WALL	ULAR WALL	^	C	c	-	-	c	r	c	4	~	~	u	
	+ +	00	000	000	. 0 0	100) M 6	u M C	000	0 ~ 0	, ω α	; ← (12	
	- + - + +	00	00	00	00	00	0 1	00	00	00	00		00	
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CONGESTIVE EDEMA	1 +	0 0	00	00	0 17	0 1	мо	N 0	00	13	12	N O	16 1	
	+ + + + +	00	00	00	00	00	0 4	00	00	00	00	00	00	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

14 - M - 2 - 15TABLE

MALE FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

		! ! !				7		ו י		F. I. I. S.				STUDY	.00	83004
	PERIOD(DAYS):		П	1-364	!] 	! ! ! ! !	365-546	46	! ! ! !	: ! !	547-7	-736	 	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		2 1	10 10	100 1000	104	101	10	100 1	1000	13	10	100 1	1000		
LUNG	(CONTINUED) (NO. EXAMINED):		2) (0 0) (0	1)	(1)() (7	5) (5	(0)	(13)(. 12) (> (5	17)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	!
	1)								•							
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	+ + +	_	0.0	00	00	00	00	0 4	0 1	00	00	₩0	0 ~	00		
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EDEMA	ı		01	0		←	H	7	Ŋ	0	13	12	5	16		
	+ :		0.6	0 0		0	0 (0	0	0	0	0	0	0		
	+ + + + + +		2.0	00	5	00	00	00	00	00	00	00	00	0 11		
EXTRAMEDULLARY HEMATOPOIESIS	OIESIS		0	o	•	-	-	٣	ſſ	c	<u>ر</u> بر	,	v	7		
	+			. 0			0	۲ -	0	0	0	0	0	0		
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						•										
HEMORRHAGE	1 +	0 0		00	00	-10	~ 0	~ ~	4 0	00	11	77	7 7	14 0		
	+ + + + +	00		0.0		0.0	00	00	~ C	00	00	00	o c	M,C		
	•)		,			o	•	•	ò)	•	>)		

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

- | ě

TABLE 14 - M - 2 - 16

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

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NO. 83			: 1 1 1																					
_			 																					
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	547-736	10	(12) (12	10	00		11	0	-	0		11	0	7 0		10	~ 0	00		12	00	0
	 	13	(13)(5.	0	00		13	0	0	0		13	0	00		13	00	00		12	ч О	0
	! ! !	•	1																					
•	: ! ! !	1000	(0)			0	00		0	0	0	0		0	0	00		0	0 0	00		0	00	0
	-546	100	5)		7	٠,	00		ιν	0	0	0		ı,	0	00		4	۲۱ (0		5	00	0
	365-5	10	7 (4)		7	0	00		7	0	0	0		7 (o	00		7	0 0	00		4	00	0
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1	α.	 S	Z																					
1		1	(00)						MACROPHAGE															
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1 1		ORGAN FINDINGS			HISTIOCYTOSIS				MIGRATION				0	NECKONIN				OSSEOUS TISSUE				PLEURISY		
1 1 1		0 80			H				MIC				1	л П				088				a.		

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

14 - M - 2 - 17TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

MALE FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

. . ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

707						
STUDY NO. 83004						
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	36	100 1000	2) (5	w000	w000	v o o o
	547-736	10	12) (0 0 0 0	11001	12 0 0
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	! ! ! !	- 00	0)	0000	0000	0000
	9	100 1000	5) (4010	w 0 0 0	v o o o
	365-546	10 1	4) (4000	4000	4000
	1	107	1) (1000	1000	4000
	! ! ! !	ı	 			
	! ! ! !	1000	(1)	4000	4000	1000
	64	10 100 1000 0 0 1)(0)	0000	0000	0000
	1-364	10	0 0	0000	0000	0000
		0 0	(5)	0000	N O O O	0000
			ED):	1 + + + + + + + +	1 + + + + + +	1 + + + + + + + + + + + + + + + + + + +
	PERIOD(DAYS)	LEVEL (PPM) NO. NECROPSIED	EXAMINED)	Σ		
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! ! !	۵.		(CONTINUED) (NO.	EPIT		
! ! !		; ; ;	000	EOLAR		
1		1 1 1 1		= ALVI		
!		GAN FINDINGS		O SNI	30515	SILI
1 1 1		ORGAN	LUNG	SWELLING OF ALVEOLAR EPITHELIUM	THROMBOSIS	VASCULITIS
1		! !				

TABLE 14 - M - 2 - 18

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

		1	1										STUDY NO. 83004
	RIOD(DAYS)		1	-364	; ; ; ; ; ;	: ! ! ! ! ! !	365-546	546		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	547-736	36	
ORGAN FINDINGS	VEL (PP NECRO		0 10	i	100 1000	0 1	10	100	1000	13	10 1	100 1	1000
T 0 M	(NO. EXAMINED) :	· · · · · · · · · · · · · · · · · · ·	2) ()) (0	0) (1)	(1)	1)(3)) (5) ((0)	(13) (12) (5) (5	16)
	1	1)											
DILATATION OF GASTRIC	FAVEOLAE -	٠				1	М	М	0	13	12	Ŋ	16
	+ + :		000	000	00	00	00	0 0	00	00		00	00
	+ + + *					0	0	0	0	0	0	0	0
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	+ + +	00		00	00	00	00	00	000	100	\ ~ (000	0 0
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					•		>	>	Þ	>	>	>	
0 F	FORESTOMACH MUCOSAL -	2				Ţ	М	'n	0	12	£.	5	16
EPITHELIUM	+	0	0	0	0	0	0	0	0	. 4		0	0
	++	0				0	0	0	0	0	0	0	0
	+ + + +	0				0	0	0	0	0	0	0	0
HYPERKERATOSIS OF FORES	FORESTOMACH -	2					٣	ſ	c	4	,	ľ	٠ ۲
					•	0	0	0	0	0	٠ ١ ٢٠	۰ ٥	0.7
	+ + + + +		00	00	00	00	00	00	00	00	00	00	00
)	,)	o)	>	>	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - M - 2 - 19

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

		1 1 1	1	1	 	1							STUDY NO. 83004
	PERIOD(DAYS) :		1-364	7		Ϋ́	365-546	9	1 1 1 1 1	 	547-736	36	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS		0 0	10 10	10 100 1000 0 0 1	101	1 0 1	10 1	10 100 1000 5 5 0	. 00	13	10 100 1000 13 5 17	100 1000	 000 17
STOMACH	(CONTINUED) (NO. EXAMINED):	(2)(0 (0	2)(0)(0)(1)	(1)(3)(3) (5) (5	0)	(13)(12)(5)(16)	12) (5) (5	16)
	1)												
INFLAMMATION	+ + + + + +	0000	0000	0000	000	4000	m 0 0 0	N O O O '	0000	7, 000	12000	v o o o	15 1 0 0
ULCER	1 + + + + + +	0000	0000	0000	1000	01100	* M O O O	* ~ 0 0 0	0000	113 0 0	110	5000	16 0
				1	1								

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

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<u>t</u>.

TABLE 14 - M - 2 - 20

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

	PERÍOD(DAYS):		1-364			365-546	97!		S	547-736	36		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	500	10	0 10 100 1000 2 0 0 1	1 0 1	10 100	0 10 100 1000 1 5 5 0	- 00	0 10 100 1000 13 13 5 17	10 100 13 5	100 1	1000 17	
SUBMAXILLARY GLANDS	(NO. EXAMINED) :	(2) () (0	2)(0)(0)(1)	1	3) (2	(1)(3)(5)(0)	60	(13)(13)(5)(17)	13) (5) (5	17)	
	1)												
REGENERATIVE CHANGE	1	2	0	0	₩	M	Ŋ	0	13	12	w	17	
	+	0	0	0	0	0	0	0	0	, H	0	0	
	+++	0	0	0	0	0	0	0	0	0	0	0	
	++++	0	0	0 0	0	0	0	0	0	0	0	0	
1) GRADE : NEC	1) GRADE : - / NEGATIVE; + / SLIGHT; ++	JOW	ERATE	/ MODERATE; +++ , SEVERE	SFVERF	1		1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

TABLE 14 - M - 2 - 21

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

												!!!!!		
	PERIOD(DAYS):		1-364	7			365-546	9 :			547-73	36		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 %	100	10 100 1000		101	10 1	100 1000	000	13	10 100 1000 13 5 17	100 10	000	
SUBLINGUAL GLANDS	(NO. EXAMINED) :	(2)(2)(0)(0)(> (0	1)	(1)(3)(5)(3) (2	5) ((0	(13)	(13)(13)(13)	5) (5	17)	
INFILTRATION OF LEUCOCYTES	YTES + + + + + + + + + + + + + + + + + + +		0000		H 0,00	1000	m000	w000		10 0000	133	w000	*	
REGENERATIVE CHANGE	+ + + + + +	~000	0000	0000	1000	1000	M000	w000	0000	13 0 0	17 0 0	v 0 0 0	17 0 0	

1) GRADE: - \ NEGATIVE; + \ SLIGHT; ++ \ MODERATE; +++ \ SEVERE. * P<0.05

14 - M - 2 - 22TABLE

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

	PERIOD(DAYS):		-	1-364			365-546	946		547-736	36	
ORGAN FINDINGS	SIED:	2	100	0 10 100 1000 2 0 0 1	1000 1	0 1	10	0 10 100 1000 1 5 5 0	. 00	0 10 100 1000 13 13 5 17	10 100 1000 13 5 17	
PAROT	(NO. EXAMINED) :	(2)	(0)	2)(0)(0)(1)	(1)	(1)	(2)	(1)(3)(5)(0)	0)	(13)(13)(5)(17)	5)(17)	
DEGENERATIVE CHANGE OF ACINI	1 + + + + + + + + + +	0000	0000	0000	4000	0 0 0	m000	v 0 0 0	0000	13 13 4 0 0 0 0 0 0 1 0 0 0	4 17 0 0 1 0 0 0	
1) GRADE : NEGATIVE			1 0		!		1	. !	1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

TABLE 14 - M - 2 - 23

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

		!	1	1 1 1 1 1 1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1	1	1	1				STUDY NO. 83004
	PERIOD(DAYS) :	1	1-364				365-546	7 9 7		 	547-736	736	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		10	100 1000	1 0 1	0 7	10	100 10	1000	13	10	100 1	1000
LIVER		(2)() (0)(0	1)	(1)(7 7 7	5) ((0)	(13)((13) (5) (5)	(17)
	1)												
ANEMIA	+ + + + + + + 	N O O O	0000	0000	1000	1000	M O H O	w000	0000	13 0 0	13 0 0	n000	. 17 0
ANGIECTASIA	! + + + + + +	~ 0 0 0	0000	0000	4000	4000	4000	nooó	0000	133	£0000	w000	15 1 0
BILE THROMBI	1 + + + + + +.	~ O O O	0000	0000		1000	4000	v 0 0 0		13 0 0	13 0 0	5000	16 1 0
CHOLANGIOFIBROSIS	· + + + + + +	0000	0000	0000		4000	4000	v o o o	0000	12 0 0	12 0 0	7 10 0	16 0 0
CONGESTION	1 + + + + + + + + +	N000	0000	0000		1000	W O O H	0000	0000	W 0 0 0	13	v 0 0 0	17 0 0

1) GRADE: - NEGATIVE; + SLIGHT; ++ MODERATE; +++ SEVERE.

TABLE 14 - M - 2 - 24

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

MALE

AN LEVEL (PPM) : 0 1 INDINGS			1				1 7 1 1 5 1 7				E 11 3	! ! ! !	 	1	STUDY NO.	83004	1
TY DEGENERATION OF HEPATIC CELLS		PERIOD(DAYS		1	1-364	1	:	!	365-5	979			547-7	36			
TY DEGENERATION OF HEPATIC CELLS	ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIE					101		i	100 1	 000	13	10	100 1	000 17		
## THE PATION OF HEPATIC CELLS HY OF HEPATIC CELLS	LIVER	ı	ı	(5) () (0) (0	1)	(1)		:	1	(13)		!			!
ARY HEMATOPOIESIS +++ 0 0 0 0 1 0 1 0 0 1 0 0 1 0 0 1 0			1)														
FRATION OF HEPATIC CELLS - 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EXTRAMEDULLARY	HEMATOPOIESIS	۱ + :	200	000	000	100	40	40	7 17	00	13	13	7 4	16 0		
HY OF HEPATIC CELLS - 1 0 0 0 0 1 3 0 4 3 1 1 1 1 1 2 0 0 0 1 3 1 1 1 1 1 2 0 0 0 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1			+ + + + + +	00	00	00	00	00	00	00	00	00	00	00			
HY OF HEPATIC CELLS	FATTY DEGENERAT	0 F	l 1	۲۰ ۲۰	00	00	0 0	00	₩ (Μr	0 0	4 4	мг	71 1	۸,		
HY OF HEPATIC CELLS - 2 0 0 1 1 4 5 0 12 13 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			+ + + + + +	• 0 0	000	000	0 11 0	0 11 0	7 7 7	100	000	7 4 7	- 27	0 th 0	1 0 N		
HY OF HEPATIC CELLS - 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	FIBROSIS		1 +	N 0	00		T 0	₩ 0	4 C	īv C	00	12	13	'nc	16		
HY OF HEPATIC CELLS - 2 0 0 1 1 3 5 0 7 8 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		•	+ + + + +	000	000		000	000	000	0.00		004	000	000	100		
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		HEPATIC	1 +	. ~ ~	00		₩ 0	ᆏ	M +	ιΛC	00	~ v	80 ×	so c	* 17 *		
- 2 0 0 1 1 4 5 0 13 12 5 + 0 0 0 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0			· + + + + +	000	000		000	000	-00	000	000	704	104	000	N O O		
	RANULATION		l + + + + + +	N O O O	0000			4000	4000	w o o o	0000	13 000 000	1200	w000	15 2 0 0		

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

TABLE 14 - M - 2 - 25

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

		1	!	1	1			1 1						STUDY	JDY NO	83004	7(
	PERIOD(DAYS		. 1	1-364				65	-546		! !	247-7	-736	! ! !	 	, ! !	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
ORGAN FINDINGS	LEVEL (PPM NO. NECROP		0 0		100 10	1000	101	10 15	100 1	1000	13	10 13	100 1	1000			
LIVER	TINUED) (NO. EX		(2) (0 (0	0 0	1)		1)(4)() (5)	(0)	(13)((13)(5) (5	. 17)	i ! !		! ! !
		1)															
MIGRATION OF HEMOSIDERIN-LADEN	:RIN-LADEN	1 +	~ <	00	0 0	۲-1 (₩ (7 (ıς	0 (12	12	w	16			
) 		+ +	00	00	00	00	00	00	00	00	10	0 4	o o	0 1			
		+ + +	0	0	0	0	0	0	0	0	0	0	0	0			
HEMORRHAGE		ı	<	0	0	-	-	7	ľ	c	21	4	v	,			
		+	0	0	0	. 0	4 0	· c	0	o c	7 7	<u> </u>	n c	\ C			
		+	0	0	0	0	0	0	0	0	, (-1	0	0	0			
		+ + +	0	0	0	0	0	0	0	0	0	0	0	0			
HYPERPLASTIC NODULE		ı	^	c	c	. •	-	~	ư	c	,	*	`	,			
		+	0	0	0	0	• 0	0	0	0	7 0	+ C	÷ ~	` C			
	•	+ + + + + +	00	00	0 0	0 0	00	00	00	0	· ← (00	00	00			
		:		>	•	o	>	>	>	>	>	5	5	5			
INFILTRATION OF LEUCOCYTES	CYTES	ı		0	c	-	-	7	7	c	•	* \ * \	* ~	* ~			
		+	· ~	0	0	0	0	0	· ~	0	11	30	+ ←	7 9			
	•	+ + + +	0 0	0 0	00	00	00	00	00	o c	↔ <	00	00	00			
				>	>	•		•	>	o	>	>	>	>			
FOCAL NECROSIS		1	2	0	0	. 0	← 1	4	Ŋ	0	13	11	* M	15			
	•	+ +	00	00	00	~- C	00	00	00	00	00	0 0	~ <	~ ⊂			
	+	+++	0	0	0	0	0	0	0	0	0	10	0) (

1) GRADE: -, NEGATIVE; +, SLIGHT; ++, MODERATE; +++, SEVERE.
* P<0.05 ** P<0.01 *** P<0.001

TABLE 14 - M - 2 - 26

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

	PERIOD(DAYS) :	1	1	-364	1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 	365-				1	547-736	9	1			
OPGAN FINDINGS	PPM) ROPSI	100	10	100	0 1000	1 0 1	1	10	100	1000	i	13	10 1	00 10	000			
100)	(CONTINUED) (NO. EXAMINED) :	2 >) (0) (0	1)	(1)	(4)		2) (0) (\$		13) (13)(5) (5	17)	! ! !		1 1 1
	1)	^																
PROLIFERATION OF BILE	E DUCT +	0 0				0.0	0 1	~ ~	ν -	00		٥ ٨	11	Mτ	12			
	+ + + + + +			00	00	. 40	00	0 0	0 11	00		।तस		1 4 0	0 0			
PROLIFERATION OF BILE WITH FIBROSIS	E DUCT + + + + + + + + + + + + + + + + + + +	N000		0000	0000	4000	4000	4000	4 1 0 0	0000		1345	4 10 4 0	7 0 1 0	940			
SMALL GRANULOMA	1 + + + + + + + +	0 0 11		0000	0000	4000	0 0 0	M 400	v 0 0 0	0000		V 5 T O	* 2 4 0 0	m ~ 0 0	13			
SWELLING OF KUPFFER (CELLS ++++			0000		4000	4000	M 4 0 0	7 1 0 0	0000		13 0 0	13 0 0	v 0 0 0	17 0 0			
THROMBOARTERITIS	1 + + + + + + + + +	N O O O		0000	0000		0 0 0	4000	nooo			113	12010	w000	17 0 0			
			1	1					1	1		1	1	1	1	1 1 1	1	1 1

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

TABLE 14 - M - 2 - 27

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO: 83004

	PERIOD(DAYS) :		1-364				365-546	97		0,	547-736		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		10 1	00	1000	0 1	10	0 10 100 1000 1 5 5 0	!	13	0 10 100 1000 13 13 5 17	1000	
LIVER	(CONTINUED) (NO. EXAMINED) :	J	(0)	2)(0)(0)(1)	1)	(1)(7 (7)	(1)(4)(5)(0)		(13)(13)(5)(17)	13)(5) (17)	
MACROPHAGE MIGRATION IN PERIVASCULAR AREA	GRATION	0000	0000	0000	1000	4000	4000	v 0 0 0		13 0 0	13 5 0 0 0 0 0	100000000000000000000000000000000000000	
1) GRADE:	1) GRADE : - / NEGATIVE; + / SLIGHT; ++ /		MODERATE;	TE; ++	MODERATE; +++ , SEVERE	ERE.	1 1 1	 		 		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

14 - M - 2 - 28TABLE

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CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

STUDY NO. 83004 MALE ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

		1	1	!	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1	1			1		
	PERIOD(DAYS):		1 - 3	-364			365-	246			547-736	36		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIĘD :	0 %	10	100	1000	101	10 5	100	1000	13	10	100 1	1000 17	
¥	EXAM	(2))(0)	000	(1)	(1)(3) (3) (8	(0)	(13) (12)(5) (5	17)	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
	1)													
ATROPHY OF PANCREATIC ACINUS	ACINUS ++++++++++++++++++++++++++++++++++++	N O O O	0000	0000		1000	4 0 0 0	m000	0000	∞ M ∨ O	N4W0	w000	7 7 2 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
DILATATION OF DUCT	! + + + + + +	0000	0000	0000	4000	1000	m 0 0 0	m 0 0 0	0000	12 1 0	12 0 0	v000	177 0 0	
FAT INFILTRATION	1 + + + + + +	0000	0000	0000	1000	4000	M O O O	m 0 0 0	0000	13 0 0	12 0 0	w000	10 0 1 0	
FIBROSIS	! + + + + + +	0000	0000	0000	1000	000	0 0 11 15	M O O O	0000	1200	12000	w000	17 0 0 0	
MIGRATION OF HEMOSIDERIN-LADEN CELLS	IN-LADEN + + + + + + + + + + + + + + + + + + +	N O O O	0000	0000	. 4000	4000	4440	m 0 0 0	0000	13 0 0	10 0 0	5000	177 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

14 - M - 2 - 29 TABLE

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS		
FOUND DEAD OR KILLED IN	SI	
FOUND DEAD OR KILLED		
FOUND DEAD	ED	
FOUND	OR	
	DEAD	
ANIMALS	FOUND	
	ANIMALS	

STUDY NO. 83004

PERI NO.	PERIOD(DAYS): LEVEL (PPM) : NO. NECROPSIED :	5 0	1-364	100 1000	0000	0 1	365-546	546 100 1000 5 5 0		13	547-736 10 100	736 100 1000 5 17)000 17
B ×	UED) (NO. EXAMINED) : 1)	(5) () (0	0) (0	1)	(1)((3)(3) (6	(13)	13)(12)(5)(17)	5) (17)
HYPERPLASIA OF ISLET-CELLS	. + + +	N O O O	0000	0000	0 0 0		0 0 1 5	m000	0000	13	11100	v 0 0 0	16 0 1
INFILTRATION OF LEUCOCYTES	+ + + + + + +	0000	0000	0000	4000	1000	m000	m 0 0 0	0000	15 0 0	11 0 0 0	w000	2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	' + + + + + + +	N O O O	0000	0000	1000	000	M000	0 5 0 1	0000	11 0 0 0	15 0 0 0	* M O H H	17 0 0 0

1) GRADE: - . NEGATIVE; + . SLIGHT; ++ . MODERATE; +++ . SEVERE. * P<0.05

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TABLE 14 - M - 2 - 30

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

MALE
FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS
F NON-NEOPLAS
DISTRIBUTION O
AND
FREQUENCY

		! ! !	!	 	; ; ; ;	. 1							STUDY NO.	83004
	PERIOD(DAYS) :	. I	1-364	7	1		365-	-246	t 1 1 1 1 1	! ! ! ! ! !	547-736	36		! ! ! !
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 2	¦	100 1	1000	101		100 1000	1000	13	10	100 1	1000	
KIDNEYS	(NO. EXAMINED) :	(2)(0 (0) (0	6	(1	1)(3)((5) ((0)	(13)	13)(12)(5) (5	17)	
	. 1)											• •		
CALCIFICATION	ı	2	0	0	0	4	М	Ŋ	0	10	12		* ^	
	+	0	0	0	0	0	0	0	0	'n	. 0	۰ ٥	ì, o	
	+ + + + + +	00	00	00	00	00	00	00	00	00	00	00	00	
												•	ı	
CHRONIC PROGRESSIVE	1	1	0	0	0	O	-	7	c	c	+	•	c	
GLOMERULONEPHROPATHY	+	7	0	0	0	7	۷ ک	٠ -	0	^ <	٠ ٧	4 W	1,1	
	++	0	0	0	0	0	0	0	• 0	. 4) M	n c	· •	
	++++	0	0	0	0	0	0	0	0	. 2) () (-1	
CYST	1	~	c	c	c	-	٣	t		7	•	L		
	+	0	0	0	0	4 0	0	n 0	o c	7 -	→ ←	n c	\ T	
	+++	0	0	0	0	0	0	0	0	0	0	0	0	
	+ + + +	0	0	0	0	0	0	0	0	0	0	0	0	
DILATATION OF URINARY TUBULES	- nBules	^	c	c	c	-	٣	u	c		*	t	, ,	
	+	0 0	0	0	00	7 0	10	0	00	0	구 주(구	n 0	1, 0	
	+ + + + + +	00	00	00	00	00	00	00	00	00	00	00	00	
					,	•	•	ı	,))	>	o.	
FIBROSIS	i ·	~ (0 (0	0	Η.	r	Ŋ	0	13	11	7	17	
	+ + +	00	00	00	00	00	00	00	00	00	0 4	0 7	00	
	+++++	0	0	0	0	0	0	0	0	0	0	0	0	

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

14 - M - 2 - 31TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

			ANIMALS		FOUND DEAD	OR	KILLED	IN	EXTREMIS					STUDY)Y NO.	83004	.+
	: ° s		-1	-364			365	365-546			1 1 1 1	547-736	36	: ! ! !	! ! !	; } ! !	į
ORGAN FIHDINGS	LEVEL (PPM) NO. NECROPS	0 0	100	100	! ~	O H	10	100	1000	1	13	10	100 1	1000			
DNEYS	(CONTINUED) (NO. EXAMINED):	(2)	0) 0		(0)(0	(1)) (3)	(5)	(0)		(13)(12) (5) (5	17)	 		!
	1)																
INFILTRATION OF LEUCOCYTES	CYTES -+		00		•	40	7 7	7 1	00		9 ~	* ~ ~	7 -	7 0			
	+ + + + + +	00	00	00	00	00	100	00	00		.00	. M O	00	00			
INTERSTITIAL NEPHRITIS	ı S	2	0	0		-	٨	r	C		۲,	-		17			
		00	00	00	000	100	00	000	000		00	+ ← + 0	. 0 0	0 0			
	+ + + + + +	00	00	50		00	00	00	00		00	00	00	0.0			
PIGMENTATION		1	0	0		0	₽	₽	0		₽	0	0	Ŋ			
	+ + + + + + +	~ O C	000	000	000	400	0 10 0	400	000		001	ν 4 -	m ~ c	80 4 C			
		>)	•			•)	•		1	4	>	>			
PYELITIS	1 +	0 0	00	00	000		MO	\$ 0	000		13	10	v 0	1700			
	+ + + + + +	00	00	00	00	00	00	00	00		00	. 0	00	00	•		
VACUOLAR DEGENERATION	1 + 4	N O C	000	000		400	004	500	000		12	1200	v 0 c	17			
	+ + + + +	00	00	0	00	0	0 1	0	00		10	00	0	00			

1) GRADE: - / NEGATIVE; + / SLIGHT; ++ / MODERATE; +++ / SEVERE. * P<0.05

TABLE 14 - M - 2 - 32

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY -NO. 83004

	PERIOD(DAYS	1 ^	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1-364	7	1 1 1 1 1	! ! ! !	365-546	346	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		547-736	3.6		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		50	100	100 1000	000	0 7	10	100 1000	1 000	13	10	100 1	1000	
URINARY BLADDER	(NO. EXAMINED)		(2) () (0)	0) (0	1)	(1)(3) (0 (7	(0	(13)	13)(12)(5) (5	17)	
		1)													
HEMORRHAGE		1	2	0	0	0	4	М	4	0	13	12	Ŋ	17	
		+ +	00	0 0	00	← (0 0	0 0	0 (0 (0	0	0	0	
		- + - + +	00	00	00	00	0	00	00	00	00	00	00	00	
HYPERPLASIA OF MUCOSAL	EPITHELIUM	ı	5	0	o	c	-	٨	٧	c	<u>ر</u> ب	,	tr	Ç	
		+	0	0	0) (-1	10	0	0	0	3 0	3 0	٦ ٥	· C	
		+	0	0	0	0	0	0	0	0	0	0	0	o 0	
	r	+ + +	0	0	0	0	0	0	0	0	0	0	0	0	
INFILTRATION OF LEUCOCYTES	TES	ı	~	0	C	-	-	۲	۲	c	,	,		1.7	
		+	0	0	0	0	0	0	۱ ۲	0	j 0	7 0	t 	0	
		+ :	0 (0	0	0	0	0	0	0	0	0	0	0	
	•	+ + +	o	>	o	၁	0	0	0	0	0	0		0.	
INFLAMMATION		ı	^	c	c	-	-	۲	7	c	<u>ر</u> ۲		v	12	
		+	0	0	0	0	0	0	. 0	0	90	10	0	30	
		++	0	0	0	0	0	0	0	0	0	0	0	0	
	+	+ + +	0	0	0	0	0	0	0	0	0	₽	0	0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

MALE FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

	1 1 2 3 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	. ; ; ; ; ;	1) ! - !) !	7 1		7	N	5 1				STUDY	NO. 83004	7	
	PERIOD(DAYS):		1-3	-364				46	! ! ! ! !	! ! ! ! !	547-73	36	1 1 1 1 1 1	1 1 1 1 1 1	 	
OPGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 2	10	100	1000		10	100 1	1000	13	10 13	100 1	1000			
S == - S ==	(NO. EXAMINED) :	(2)()(0))(0)	(1)	(1)(3) (2	5)((0	(13)((13)(5) (5	17)		! ! ! !	
	1)															
АТВОРНУ	1	8	0	0	7	0	* M	* ທ	0	11	12	. M	14			
	+ +	00	00	00	00	4 C	00	00	00	₩ 0	0 -	0 -	0 0			
	++++	0	0	0	0	0	0	0	00) (1	10	- -	u ←1			
HEMORRHAGE	ı		0	0		-	۲	7	c	۲,	۲,	v	7			
	+	0	0	0	0	0	0	0	0	0	0	0	0			
	+ + + + +	0 0	0 0	0 0	0 0	0 0	00	← 1 C	00	00	00	00	00			
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NECROSIS	۱ +	N C	0 0	0 0	c	c	m c	v c	0 0	13	13	νc	16			
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	+ + + +	0	0	0	0	0	0	0	0	0	0	0	0			
PERIVASCULITIS	1 +	~ ⊂	00	00	~ ⊂	₩ 0	m c	w c	00	13	13	4 C	17			
	+	0	0	0	0	0	0	0	0	0	0) (0			
	+ + +	0	0	0	0	0	0	0	0	0	0	0	0			

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

TABLE 14 - M - 2 - 34

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

	PERIOD(DAYS):	1	1-364				365	365-546		! ! ! ! !	547-736	36	: : : : : : : :	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 8	10	10 100 1000 0 0 1	00	101	10	100	1000	13	10	100 1	0 1000 5 17	
EPIDIDYMIS	X A M	(2)() (0) (0	1)		1)(3)	3)(5)(5	(0)	(13)	13)(12)(5) (5	17)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
АТВОРНУ	1 + + + + + + + + + + + + + + + + + + +	0000	0000	0000	4000	1000	M O O O	. 1000	0000	12 1 0	112000	4010	7 T 0 0 0 0	
ЕРЕМА	1 + + + + + + +	0000	0000	0000	4000	4000	M O O O	v 0 0 0	0000	13 0 0	11 0 0	N 0 0 0	17 0 0	
GIANT CELL GRANULOMA	. + + + + + + + + + + + +	N O O O	0000		1000	1000	M000	W O O O	0000	13 0 0	15 0000	4004	17 0 0	
HYPERPLASIA OF MUCOSAL	EPITHELIUM ++++++++++++++++++++++++++++++++++++	N000	0000	0000	1000	4000	m 0 0 0	5000	0000	13 0 0	1100	v o o o	17 0 0	

- 2 - 35 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

MALE

100 1000 5 17 (13)(13)(5)(17) 000 00 0 000 547-736 000 6 100 1000 5 0 0000 3)(4)(M 0 0 0 1) 100 1000 0 1 000 0) 0)(0 0000 0000 2)(~000 (NO. EXAMINED) : PERIOD(DAYS) LEVEL (PPM) NO. NECROPSIED HYPERPLASIA OF MUCOSAL EPITHELIUM INFILTRATION OF LEUCOCYTES GIANT CELL GRANULOMA PROSTATIC GLAND INFLAMMATION FINDINGS ATROPHY

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

TABLE 14 - M - 2 - 36

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

	PERIOD(DAYS):		1-364	7	 	 	365-546	9	1 1 1 1 1	! ! ! ! ! !	547-73	9,		!
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 %	10	10 100 1000	1	0 1	10 100	100 1000	- 00	13	10 100 1000 13 5 17	00 10	 00 17	
SEMINAL VESICLE	(NO. EXAMINED) :	(2) (2)(0)() (0	1)	(1)(3) (2	5) (5	(0)	(13)(12)(5)(17)	12)(5) (5	17)	!
	1)	·												
ATROPHY	1	2	0	0	~	٦	~		0	4			~	
	+	0	0	0	0	0	↤		0	9			13	
	+++	0	0	0	0	0	0	0	0	٣	7	2	2	
	+ + + +	0	0	0	0	0	0		0	0			0	
NOTEN	1	ſ	c	c	•	•	١		•	1		L	ţ	
	ı +	v 0	0	00	۰ 0	→ 0	n 0	n 0	00	2 0	1.1	n c	17	
	++	0	0	0	0	0	0		0	0		0	0	
	++++	0	0	0	0	0	0		0	0		0	0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

14 - M - 2 - 37 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

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0.83004	 		1 1 1 1 1 1																					
STUDY NO	 	1																						
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	-245	10	(12)(12	0	00)	12	0	0	0	,	-	0	0	,	7 T	0	0	,	12	0 0)
		13	(12)(12	0	00	•	12	0	0	0	,	10	0	0	,	77	0	0		77	00)
اد		1	(0																					
1 1 1 1		1000	5)(0		0	0	00	•	0	0	0	0	c	0	0	0	c	0	0	0	•	00	00	>
<u>د</u>	-546	100			. 4	←	00)	Ŋ	0	0	0	7	٠,	0	Ö	•	÷	0	0	¥ (Λ Ο	00	>
ו ר ו ר ו ק	365-546	10	(5) (ľ	0	00		Ŋ	0	0	0	v	۰ ٥	0	0	t	n 0	0	0	∺ t	Λ Ο	00	>
		0 4	(1)		₽	0	00	•	7	0	0	0	-	0	0	0	•	7 0	0	0	•	ъ с	00	>
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1	1-364	10	60		0	0	00	•	0	0	0	0	c	0	0	0	c	0	0	0	•	00	00)
		0 8	(2)		2	0	0 0	•	2	0	0	0	^	0	0	0	•	~ ~	0	0	•	V 0	00	>
; ; ;				1)	ı	+	+ + + + +		ı	+	++	+ + +	ı	+	++	+ + +		1 +	++	+ + +		1 +	+ +	-
; ; ; ;		LEVEL (PPM) NO. NECROPSIED	(NO. EXAMINED)				•		•			7				T				+			7	•
1	PERIOD(DAYS	NECRO	EXA										2	:			-	בררי						
1 1	PERI	LEVE NO.	CNO										N - 1 A									CELLS		
1		1											HEMOSTOFRIN-LADEN				0 20 00 00 00 00 00 00 00 00 00 00 00 00					BASUPHILIC CELLS		
1													Y F M O S					2				SOPH		
1		S	SLAND						ш				u.					5				0F B/		
1		GAN FINDINGS	ARY						HEMORRHAGE				ATTON	CELLS				ひょしん				SWELLING		
1 1 1		0 8	PITUITARY GLAND		CYST				немо				M I G	CEL			2					SE		
1		1	α.																					

1) GRADE: - . NEGATIVE; + . SLIGHT; ++ . MODERATE; +++ . SEVERE. * P<0.05

TABLE 14 - M - 2 - 38

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ORGAN LEVEL (PPM) 100 1000 100000 100000 100000 1000000		1	1	! ! !	1	 	! ! ! !	1						STUDY NO. 83004
(NO. EXAMINED) : (, 2)(0)(0)(1)		1	! ! !	1-36	7	1		365-5			! ! ! ! ! !	547-7	36	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
(NO. EXAMINED) : -(, 2)(0)(0)(-1) (1)(3)(5)(0) ((13)(12)(5)(12)(5)(12)(5)(12)(5)(12)(5)(12)(5)(12)(5)(12)(5)(12)(5)(12)(12)(5)(12)(12)(12)(12)(12)(12)(12)(12	ORGAN FINDINGS	•• •• !	0 2	10	100 10	00	101	1	100 10	000	13	i	100 1	17 .
F + 2 0 0 1 1 3 5 0 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	THYROID GLANDS	(NO. EXAMINED) : . (.) (0	1)	(1)		i	(0	(13)	(12) (:	17)
F + 2 0 0 1 0 3 5 0 1 10 5 10 5 1 10 5 1 10 5 1 10 5 1 10 5 1 10 5 1 10 5 1 10 5 1 10 5 1 10 5 1 10 5 1 10 5 1 10 5 1 10 5 1 10 5 1 10 5 1 10 5 1 10 5 1 10	CYST	1 + + + + + +	N O O O	0000	0000	1000	1000	m000	5000	0000	12 0 0	122	w000	17 0 0 0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ENLARGEMENT OF FOLLICLE	1 + + + + + + + +	0000	0000	0000	4000	0 0 0	* M O O O	. * v , 0 0 0		13 0 0	10 2 0 0	v 0 0 0	17 0 0 0
	HYPERPLASIA OF C-CELLS	1 + + + + + +	N O O O	0000	0000	1000	1000	0 0 17 17	w000	0000	13 0 0	11 0 0	w000	16 0 0

1) GRADE: - . NEGATIVE; + . SLIGHT; ++ . MODERATE; +++ . SEVERE. * P<0.05

TABLE 14 - M - 2 - 39

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

ADPRINAL GLANDS (NO. EXAMINED): (2)(0)(0)(1) (1) (4)(5)(0) (13)(12)(5)(16) ADPRINAL GLANDS (NO. EXAMINED): (2)(0)(0)(1) (1) (4)(5)(0) (13)(12)(5)(16) HEMORRHAGE (LANDS (NO. EXAMINED): (2)(0)(0)(0)(1) (1)(4)(5)(0) (13)(12)(5)(16) HEMORRHAGE (LANDS (NO. EXAMINED): (2)(0)(0)(1) (1)(4)(5)(0) (13)(12)(5)(16) HYPERPLASIA OF CORTIC CELLS (NO. EXAMINED): (2)(0)(0)(0)(0)(0)(0)(0)(0)(0)(0	ORGAN FINDINGS		; ; ; ; ;	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		! 9	0	1 1 1 1 1		1111	11111		: ~	1 1 1 1 1 1	
OF CORTIC CELLS - 2 0 0 1 1 3 5 0 13 12 + + 0 0 0 0 0 0 1 1 3 12 + + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0 0	10 1	001	0 4 !	1		00 10	00	13	13		17	
1) - 2 0 0 1	HEMORRHAGE	1)	(2)(000) (0	1)	(1)(7 (7	5)((0	(13)	(12)	:	. 16)	
+ + + + + + + + + + + + + + + + + + +	HEMORRHAGE														
+ + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1	. 2	0	0		1	M	2	0	13	12	Ŋ	. 16	
+++ 0 0 0 0 1 1 4 5 0 0 1 1 1 1 5 1 1 1 1 1 1 1 1 1 1 1 1		+ +	0 0	0 0	0 0	0 0	0 0	0 0	0 (0 (0 (0 (0	0	
- 2 0 0 1 1 4 5 0 1 1 1 5 1 1 5 1 1 5 1 1 1 1 1 1 1 1		+ + + + +	00	0	00	00	00	o ⊢	00	00	00	00	00	0 0	
+ + 0 0 0 0 0 1 1 1 1 1 8 1 1 1 8 1 1 1 1 1														ı	
+ + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	HYPERPLASIA OF CORTIC CELLS	ı	2	0	0	r,	٢	7	Ŋ	0	13	11	50	15	
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+	0	0	0	0	0	0	0	0	0	, , ,	0	· - 1	
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+++	0	0	0	0	0	0	0	0	0	0	0	0	
- 2 0 0 1 1 4 5 0 13 12 5 12 14 14 14 15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+ + +	0	0	0	0	0	0	Ο.	0	0	0	0	0	
- 2 0 0 1 1 4 5 0 13 12 5 14 4 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0										-					
++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NECROSIS	1	2	0	0	1	~ 1	7	Ŋ	0	13	12	5	15	
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+	o	0	0	0	0	0	0	0	0	0	0	0	
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		++	0	0	0	0	0	0	0	0	0	0	0	0	
** - 2 0 0 1 4 0 12 4 3 + 0 0 0 0 0 2 1 0 1 1 +++ 0 0 0 0 0 0 0 0 0 0 0 1 +++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+ + +	0	0	0	0	0	0	0	0	0	0	0	1	
- 2 0 0 1 6 0 12 4 3 + 0 12 4 3 + 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0)		,	
+ 0 0 0 0 0 0 0 1 7 1 ++ 0 0 0 0 0 1 0 0 0 1 1 +++ 0 0 0 0 0 0 0 0 0 0 0 0 0	VACUOLAR DEGENERATION OF CORTI		2	0	0	1	0	₽	. 4	0	12	7	M	, ω	
++ 0 0 0 0 0 1 1 0 0 0 1 1 1 1 1 1 1 1 1	CELLS	+	0	0	0	0	0	2	 1	0	+	7	- -	9	
0 0 0 0 0 0 0 0 0 0 0			0	0	0	0	7	0	0	0	0	₽	⊣	2	
		++++	0	0	0	0	0	7	0	0	0	0	0	0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05 ** P<0.01

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TABLE 14 - M - 2 - 40

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

MALE
C FINDINGS
NON-NEOPLASTIC
FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC F
FREQUENCY AND

			LS FOUN	D DEAD (ANIMALS FOUND DEAD OR KILLED IN <u>EXTREMIS</u>	D IN EX	TREMIS			STUDY NO. 83004
	PERIOD(DAYS):	1-364	64		1 10	365-546	 	247	547-736	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 2	10 100 1000	00 1	0 [10 100	100 1000	0 10	100 1000	 000 17
MUSCLE (Q. FEMORIS)	(NO. EXAMINED) : (2)(0))(0)(0	1)	(1)(3)(5)((0)((13)(13)() (17)
АТВОРНҮ	1 + + + + + + + + + +	0000	0000	4000	4000	M O O O	0000	13 12 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	M O O O	17 0 0 .
HYALINE DEGENERATION	1 + + + + + + + +	0000	0000	1000	1000	8 0 0 0 0 0 0 0	0000	13 12 0 0 0 0	w000	17 0 0

TABLE 14 - M - 2 - 41

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

	PERIOD(DAYS):		1-364				365-	365-546			547	547-736	: ! ! ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 8	10 100	10 100 1000	1 0 1	1 1 1	10	100	10 100 1000	13	!	100	10 100 1000 13 5 17	
SKIN	(NO. EXAMINED) :	(2) (0)(0	0)(1)	1)	(1)(3) ((8)	5)(0)	(13)) (13	5) ((13)(13)(5)(17)	
	1)													
DERMATITIS	1	2	0		€-1	₽	M			13				
	+	0	0	0	0	0	0	0		0		`		
	++	0	0		0	0	0			0				
	+ + +	0	0		0	0	0		0	0	0	0	0	
KERATOSIS		^	c		•	•	٣			,				
	+	10	0	0	- 0	- 0	10	٥ ٥	00	77	70	n C	, O	
	+++	0	0		0	0	0			· ←				
	+++	0	0		0	0	0			0				

TABLE 14 - M - 2 - 42

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

	PERIOD(DAYS):		1-1	1-364		! ! ! ! !	365-546	46	 	1 1 1 1 1	547-736	36	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 0 0	10	100	10 100 1000	0 4	10	10 100 1000	00	13	10 100 1000	100 1)000 17	
MAMMARY GLAND	(NO. EXAMINED) :	(2)	; 0	2)(0)(0)((0)	(1)(3)(5)(3) (5) (ç o	(13)(13)(13)(5)(17)	17)	
	1)													
DILATATION OF GLAND		2	0		0	7	М	Ŋ	0	۰	7	5	1 7 *	
	+	0	0	0	0	0	0	0	0	Ś	• •		'n	
	+++	0	0	0	0	0	0	0	0	2	0		0	
	+ + + +	0	0	0	0	0	0	0	0	0	0		0	
HYPERPLASIA	t	2	0	0	0	H	м	'n	0	13	, C	4	17	
	+	0	0	0	0	0	0	0	0	0	0	. 0	. 0	
	+++	0	0	0	0	0	0	0	0	0	0	~	0	
	+ + + +	0	0	0	0	0	0	0	0	0	0	0	0	
	·													
·						1	1 1 1 1		1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	!			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

1) GRADE: - . NEGATIVE; + . SLIGHT; ++ . MODERATE; +++ . SEVERE. * P<0.05

TABLE 14 - M - 2 - 43

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

ORGAN LEVEL (PPM) : 0 FINDINGS CALCIFICATION, SCLERA CATARACT HEMORRHAGE INFILTRATION OF LEUCOCYTES RETINAL ATROPHY FINDINGS LEVEL (PPM) : 0 1) CACROPSIED : 2 1) CACROPSIED : 2 1) CACROPSIED : 0 +++ 0			!	1	1	1	! ! ! !	1	1	1				STUDY NO. 8	83004
CALCIFICATION, SCLERA HEMORRHAGE INFILTRATION OF LEUCOCYTES RETINAL ATROPHY FINDINGS (NO. EXAMINED) : (1) (NO. EXAMINED) : (1) 1) 1) 1) 1) 1) 1) 1) 1) 1			1	1-3	-364			365-546				547-736	36	! ! ! ! ! ! !	1 1 2 2 4 4 4
BALLS (NO. EXAMINED): (1) ALCIFICATION, SCLERA +++ +++ +++ HATARACT	ORGAN FINDINGS	!		10	100	1000	10 1	10	100 10	1000	13	10 13	100 1	1000	
10N, SCLERA		EXAMINED)	(2)	0 0 0	60	1)	(1)(3) (2	5) (5	(0	(13)((13) (5) (5	17)	! ! ! !
10N, SCLERA		1)													
ON OF LEUCOCYTES + + + + + + + + + + + + + + + + + + +	CALCIFICATION, SCLERA		~ 0	00	0 (← (H (m	ω,	0	13	13	ın -	15	
ON OF LEUCOCYTES +++ +++ **************************		+ +	00	00	00	00	00	00	00	00	00	00	00	0 0	
ON OF LEUCOCYTES + + + + + + + + + + + + + + + + + + +		+++++	0	0	0	0	0	0	0	0	0	0	0	0	
ON OF LEUCOCYTES + + + + + + + + + + + + + + + + + +	CATARACT	I	~	0	0	0	7	М	'n	0	12	13	50	16	
ON OF LEUCOCYTES - + + + + + + + + + + + + + + + + + +		+	0	0	0	0	0	0	0	0	1	0	0) (
ON OF LEUCOCYTES +++ +++ +++ +++ +++ +++ +++ +++ +++ ++		+ + +	0 0	0 0	00	0 ,	0 0	0 0	0 0	0 0	0 (0 (0 (0 (
ON OF LEUCOCYTES		+ + +	>	>	5	т	0	ɔ	ɔ	0	0	0	0	0	
TION OF LEUCOCYTES	HEMORRHAGE	1	2	0	0	H	⊣	2	Ŋ	0	12	13	rv	17	
TION OF LEUCOCYTES		+	0	0	0	0	0	~1	0	0	-	0	0	0	
TION OF LEUCOCYTES		+++	0	0	0	0	0	0	0	0	0	0	0	0	
TION OF LEUCOCYTES ++ +++ ATROPHY		++++	0	0	0	0	0	0	0	0	0	0	0	0	
+ + + + + + + + + + + + + + + + + + +	IMFILTRATION OF LEUCOC		2	0	0	÷	↔	М	Ŋ		13	13	Ŋ	. 16	
# + + + + + + + + + + + + + + + + + + +		+	0	0	0	0	0	0	0	0	0	0	0	₩.	
+++ ATROPHY ++		++	0	0	0	0	0	0	0	0	0	0	0	0	
ATROPHY + + + + + + + + + + + + + + + + + + +		++++	0	0	0	Ο,	0	0	0	0	0	0	0	0	
+ + +	VEGORAL INNITES	1	r	c	c	٠.	•	۲	v	c	7	<u>ر</u> بر	ư	, ,	
		+	0 0	0	0	10	- 0	0	0	0	10	10	٥ ١	0	
		++	0	0	0	0	0	0	0	0	0	0	0	0	
		++++	0	0	0	0	0	0	0	0	0	0	0	€1	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FINDINGS	
NON-NEOPLASTIC	
DISTRIBUTION OF	
FREQUENCY AND	

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

MALE

		1	1	1 1	1 1 1 1 1 1 1 1 1	 - - - -	; ; ;						STUDY NO	. 83004
	PERIOD(DAYS):	1	1-364	24			365-546				547-736	36	! ! ! ! !	! ! ! ! !
ORGAN FINDINGS	LEVEL (PPM) : : NO. NECROPSIED :	00	10	100 1000	000	0 1	i	100 1000	1000	13	10	100 1	1000	
HARDERIAN GLANDS	(NO. EXAMINED) :) (2))(0)	1)) (1) (3) (5) (5	(0)	(13)	13)(13)(5) (5	17)	! ! ! ! !
DILATATION OF GLAND	- + + +	200	000	000	400	.00	мос	N 0 0	000	13	12	v 0	17	
	+ + + +	0	00	00	00	0 0	00	00	00	00	00	00	00	
HYPERSECRETION	+ + + + + +	0000	0000	0000	1000	. 0 0 0	m000	4400	0000	14 0000	00 00 00	4100	1 7 0 0	
INFILTRATION OF LEUCOCYTES	TES S	000	0000	0000	4000	4000	0 0 5 1	1000	0000	12 1 0	17 0 0 0 17 0	4100	14 3 0	
IMFLAMMATION	! + + + + + + + + + + +	0000	0000	0000	0 0 0	0 0 0	m 0 0 0	W 0 0 0	0000	10 0 10	0 0 0	v 0 0 0	17 0 0 0	·

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - M - 2 - 45

4.

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	! ! ! !	1				1 1 7						STUDY	NO. 83004	70
				-364			365-546	546	! ! ! ! !	; ; ; ; ;	547-7	-736	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 %	100	100	1000	. 0 1	10	100	1000	13	10	100	1000		
BRAIN	0. EX	(2)	60		0)(1)	(1)) (3)	(5)((0)	(13)((12)() (5)	(17)	! ! ! ! ! !	1 1 1 1
	1)														
DILATATION OF CEREBRAL	VENTRICLE	2	0	0			m	5	0	10	10	7	15		
	+ -	0 0	00	0 0	00	0 0	0 0	0 0	0 (~ •	स (← •	₩,		
	+ + + +	0	0	0		00	00	00	0	- 0) H	00	0 1		
ENCEPHALOMYELITIS	1	₩.	0	0	J	1	М	5	0	13	12	5	17		
	+		0	0	0	0	0	0	0	0	0	0	0		
	+++	0	0	0	0	0	0	0	0	0	0	0	0		
	++++	0	0	0	0	0	0	0	0	0	0	0	0		
		•	•	,											
немоккнясе	1 -	∾ ⊂	0 0	0 0	~ (m c	ın (0 0	ω ι	11	4 ,	12		
	+ 4	O	0 0	0	> <		> 0	> 0	o (Λ (.⊣ (⊣ (ჟ ,		
	+ + + + +	00	0	00	00	0	00	00	00	00	00	00			
LEUKEMIC EMBOLISM	1	2	0	0	1	0	2	М	0	13	11	7	17		
	+	0	0	0	0	0	0	0	0	0	0	0	0		
	+ :	0 0	0 0	0 (0 0	0,	۰,	←1 •	0 (0 (← (0	0 (
	+ + +	0)	0	ɔ		Н	,-1	0	0	0	-	0		
PERIVASCIII IIIS	ı	-	C	C	-		۲	ľ	c	۲,	7	ľ	17		
	+	. L	0	0	0	0	0	0	0	0	0	0	. 0		
	+ -	0 0	0 0	0 0	00	00	0 0	0 0	0 0	0 0	0 0	0 0	00		
	+ + +	>	0	5	5	0	o	0	o	o	o	5	ວ		

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

14 - M - 2 - 46TABLE

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

MALE

STUDY NO. 83004			 									
STUD		100 1000	5)(17)		11	9	0	0	17	0	0	0
*	36	0 100 1000 3 5 17			H	7 .	0	0	rv	0	0	0
	547-736	13	12)(œ	7	0	0	12	0	0	o .
		0 13	(13)(12)(80	Ŋ	0	0	13	0	0	0
REMIS		1000	(0)		0	0	0	0	0	0	0	0
EXT	979	100) (5		₽	7	0	0	7	0	0	0
ED IN	365-546	10 100 1000 5 5 0	1)(3)(M	0	0	0	M	0	0	0
סא אורר		101	(1)(0	0	0	⊣	0	0	0
ANIMALS FOUND DEAD OR KILLED IN <u>EXTREMIS</u>		00	1)		1	0	0	0	~	0	0	0
FOUN		00 10) (0		0	0	0	0	0	0	0	0
IMALS	1-364	10 100 1000	0 0		0	0	0	0	0	0	0	0
A		0 2	2) (2		2	0	0	0	₩.	7	0	0
				<u></u>	1	+		_	1	_		
	PERIOD(DAYS) :	LEVEL (PPM) : NO. NECROPSIED :	UED) (NO. EXAMINED) :		·	+	++	++++	,	+	++	+ + +
	PERI	LEVE	(CONTINUED)						DF GLIA CELLS			
		ORGAN FINDINGS	BRAIN		PIGMENTATION				PROLIFERATION OF GLIA CELLS			

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

14 - M - 2 - 47 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

MALE
FINDINGS
NON-NEOPLASTIC
FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS
FREQUENCY AND

1) GRADE: * P<0.05

TABLE 14 - M - 2 - 48

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

100 1000 5 17 (13)(13)(5)(17) 17 0 0 547-736 000 (1)(3)(5)(0) 10 100 1000 5 5 0 0000 000 (NO. EXAMINED) : (2)(0)(1) 10 100 1000 0 0 1 0 ~ ~ 0 0 0 LEVEL (PPM) : NO. NECROPSIED : PERIOD(DAYS) DEMYELINIZATION SCIATIC NERVE ORGAN FINDINGS

TABLE 14 - M - 2 - 49

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS MALE

STUDY NO. 83004 (13)(13)(5)(17) 10 100 1000 13 5 17 1600 v 0 0 0 547-736 000 000 13 ANIMALS FOUND DEAD OR KILLED IN EXTREMIS (1)(3)(5)(0) 10 100 1000 5 5 0 0000 0000 365-546 -000 (NO. EXAMINED) : (2)(0)(0)(1) 100 1000 0 1 0000 0000 10 0000 1) PERIOD(DAYS): LEVEL (PPM) NO. NECROPSIED

FINDINGS

OPTIC NERVE

GLIOSIS

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS FEMALE

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

PERI	PERIOD(MONTHS):	: : : : :	. 7	24	! ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	31	10	i	100 1000 31 35	
HEART	(NO. EXAMINED) :	(31)(0) (0) (0	0)(35)	
	1)	^				
FIBROSIS	I -					8
	+ +	2 2	00	00	7 7	
	+ + + +					0
INFILTRATION OF LEUCOCYTES	TES	56				0
	+ :	iv (5
	+ + + + +	00	00	00	00	00
THICKENING OF ARTERIAL WALL	WALL +++	31000	0000	0000	34 1 0	7 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2

• • • • • • • • • • • • • • • • • • • •	AL STUDY	INDINGS FEMALE	STUDY NO. 83004		
	CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT	FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS	ANIMALS KILLED ON SCHEDULE	PERIOD(MONTHS) : 24	
				! ! ! !	

ORGAN FINDINGS	LEVEL (PPM) : 0 10 100 1000 NO. NECROPSIED : 31 33 31 35	31	10	31	
SUMYH	(NO. EXAMINED)	(08)) (0)	6	(35)
		1)			
					*
HYPERPLASIA OF EPITHELIAL	IAL	7 -	0	0	1.4
RETICULUM CELLS		+ 22	0	0	18
	+	7 ++	0	0	
	+++	0 +	0	0	0
	1				
1) GRADE : - , NEG	17S · +	W \ ++ .	ODERAT	+	+++ , SEVERF.

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CHRONIC	AND	CARCINOGENIC	: AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY	
		OF METHANOL	IN FISCHER RAT	

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FINDINGS
FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS
0 F
DISTRIBUTION
AND
FREQUENCY

ANIMÁLS KILLED ON SCHEDULE

-	000	35)		34	1	0	0	34	-	0	0	
	100 1000	30)(0)(0)(32)			0		0	0			0	
24	: :	0) (0		0	0	0	0	0	0	0	0	
1 1 1 1 1	31	(30)(30	0	0	0	28	7	⊣	0	
PERIOD(MONTHS):	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINED) :	1)	1	+	++	+ + + +	S	+	++	+ + +	
	ORGAN FINDINGS	LYMPH NODES (SUBMAXI.)		BLOOD ABSORPTION				 INCREASE OF PLASMA CELLS				

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

	RIOD	PERIOD(MONTHS):		5.4		
(28) 27 1 10 0 0 0	> · ·	LEVEL (PPM) : NO. NECROPSIED :	3.1	: :	31	00
27 0 0 1 0 0 0 0 0 0 0 0 0 0 0 14 0 0 0		EXAMINED) :		0) (0	0 (0	(6
27 0 0 0 0 0 0 0 0 0 0 0 14 0 0		1)				
1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1	27	0	0	6
0 0 0 0 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+	1	0	0	0
0 0 0 0 11, 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+	0	0	0	0
9 0 0 14 0 0 4 0 0		++++	0	0	0	. 0
14 0 0 4 0 0		1	6	0	0	0
7		+	14	0	0	8
		++	7	0	0	-

				=	ABLE 14 - F - 1 - 5		
		CHRONI	C AND	CARCI OF	CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT		
		FREQUENCY	ENCY A	ND DI	AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS	FEMALE	
				ANI	ANIMALS KILLED ON SCHEDULE	JOOF & ON YOUTS	
	PERIOD(MONTHS) :	! ! ! !	24	 			!
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	31	10	100 1000	000 35		
YMPH NODES (MESENT.)	(NO. EXAMINED) :	(31)((32)(0)(0	35)		1
	£1	1)					
ANGIECTASIA	I +	27	00	00	31	e Me	
	+ + + + + + +		00	00	0		
EXTRAMEDULLARY HEMATOPOIESIS		31	00	00	34 1		
	+ + + + + + .	00		00	0 0		
		1	1	1			i

TABLE 14 - F - 1 - 6

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS KILLED ON SCHEDULE

PERIOD(MONTHS):	PERIOD(MONTHS)			24			
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		31	10 1	100 10	1000	
SPLEEN	(NO. EXAMINE		(31)(0) (0	0) (0	35)	
	•	1)					
АТВОРНҮ		1 + + + + + + + +	31000	0000	0000	34 0 0	
CONGESTION		1 + + + + + +	30	0000	0000	W W th th th	
EXTRAMEDULLARY HEMATOPOIESIS	DIESIS	1 + + + + + + + +	14 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0000	0000	111 19 0	
HEMOSIDEROSIS		1 + + + + + + +	10 2 3 3	0000	0000	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
PROLIFERATION OF RETIC	RETICULAR CELLS	+ + + + + +	31 0 0	0000	0000	34 1 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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C INHALATION TOXICOLOGICAL STUDY	OL IN FISCHER RAT
CARCINOGENIC	OF METHANOL
AND	
CHRONIC	

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

	PERIOD (MONTHS)	: (3	! ! ! !	24	 		
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		31	10 10 33	100 1000	000	
BONE MARROW	(NO. EXAMINED)	:	31)() (0	0)(32)	35)	
		1).			•		
ACTIVATION OF HEMATOPOIESIS	OIESIS	+ + 	. 28	000		30 2 3	
		+ + +	0	0		10	
INCREASE OF GRANULOCYTES	res	1 4	30			35	
		- + + + + +	0 11 0	000	000		
HYPOHEMATOPOIESIS		ı	31			34	
		+ + +	00	00	00	0	
		+ + +	0				
PROLIFERATION OF RETICULAR CELLS	ULAR CELLS	1 +	24	00	0 0	31	
		+ + + + +	00			0	

		FREQUENCY		AND DI	DISTRIBUTION OF NON-NEOPLASTIC	ASTIC FINDINGS
				ANI	ANIMALS KILLED ON SCHEDULE	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PERIOD(MONTHS) :	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	24	 	i	
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED	31	10	100	1000	
NASAL CAVITY	(NO. EXAMINED) :	(31)(6	6	(35)	1 1 1 1 1 1 1 1 1 1
	1	1)				
CALCIFICATION	i	М		0	33	
	+ ++		00	00	~ ~	
	+ + + +		0	0	0 0	
rukeign body Granuloma	· ·	. 31	0 0	0 (,34	
	+ +		00	0	0 7	
	+ + + +		0	0	0	
INFILTRATION OF LEUCOCYTES	YTES		o	c	-	
			0	0	1 C	
	++	9	0	0	9	
	+ + + +		0	0	0	
INFLAMMATION	ı	29	0	0	33	
	+	1	0	0	; (-1	
	++		0	0	ा स् न	
	++++	0	0	0	0	
OSTEOSCLEROSIS		30	C	C	. 55	
	+	0	0	0	0	
	++	1	0	0	0	
	+ + + +	0	0	0	0	

STUDY NO. 83004

FEMALE

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TABLE

1) GRADE

		СНБ	ONIC	AND CA	RCIN OF M	CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT
		ī.	REQUEN	CY AND	DIS	FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS
					ANIM	ANIMALS KILLED ON SCHEDULE
	PERIOD(MONTHS)		1 1 1	24	1	
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		31	10 1	100 1000 31 35	000 35
ARYNGOPHARYNX	(NO. EXAMINED): (31)(0)(0)(35)		(31)() (0	0 (0	35)
		1)				
CALCIFICATION OF VASCULAR WALL	-AR WALL	ı	31	0	0	72
		+ +	00	00	00	0
	+	+ + +	0	0	0	
CYSTIC DILATATION OF GLAND	AND	ı	31	0	0	32
		+ 4	00	0 0	0 0	m
	+	+ + + +	00	> 0	> 0	000

LARYNGOPHARYNX

STUDY NO. 83004

FEMALE

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- , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. 1) GRADE:

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FOREIGN BODY GRANULOMA

HYPERSECRETION

25 10 0

INFILTRATION OF LEUCOCYTES

	STUDY	
- 10	TOXICOLOGICAL	RAT
14 - F - 1	INHALATION .	
TABLE	CARCINOGENIC	OF METHANOL
	AND	
	CHRONIC	

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FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

	PERIOD(MONTHS) :				
ORGAN FINDINGS	EVEL (PPM) : O. NECROPSIED :	1 	10	0 10 100 1000 31 33 31 35	35
LARYNGOPHARYNX	INUED) (NO. EXAMINED):	(31)((0	(0)	35)
	1)				
INFLAMMATION		29	0	0	32
	+	0	0	0	2
	++	2	0	0	1
	++++	0	0	0	0
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		: : : : : : : : : : : : : : : : : : :	! !	1	
1) GRADE :	1) GRADE : - , NEGATIVE; + , SLIGHT: ++		2 2 2	+ : = +	MODERATE: +++ CEVEDE

	STUDY	
- 11	T O X	RAT
14 - F - 1	INH	IN FISCHER
TABLE	ပ	OF METHANOL
	AND	
	CHRONIC	

FEMALE FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004 (NO. EXAMINED) : (31)(0)(35)
 10
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 1000

 33
 31
 35
 24 31 4 0 0 PERIOD(MONTHS): LEVEL (PPM) NO. NECROPSIED INFILTRATION OF LEUCOCYTES ORGAN FINDINGS TRACHEA

- , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. 1) GRADE:

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	STUD
- 12	TOXICOLOGICAL RAT
14 - F - 1	INHALATION IN FISCHER
TABLE	CARCINOGENIC OF METHANOL
	AND
	CHRONIC

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

STUDY NO. 83004 ANIMALS KILLED ON SCHEDULE 100 1000 31 35 (NO. EXAMINED) : (31)(0)(35) 000 0 0 0000 0000 0000 1 + + + + + + + + LEVEL (PPM)
NO. NECROPSIED PERIOD (MONTHS) CALCIFICATION OF VASCULAR WALL HISTIOCYTOSIS ADENOMATOSIS FINDINGS HEMORRHAGE EMPHYSEMA

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

72 :		ED): (31)(0)(35)	1)	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0 0 0	0	- 28 0 0 30	0	0 0	0	0	+ 1 0 0 1	0 0 0.	0	
PERIOD (MONTHS)	ORGAN LEVEL (PPM) FINDINGS NO. NECROPSÍED	(CONTINUED) LUMG (NO. EXAMINED):		INFILTRATION OF LEUCOCYTES			OSSEOUS TISSUE				PLEURISY				

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS KILLED ON SCHEDULE

PERIOD(MONTHS):	PERIOD(MONTHS):	! ! ! ! ! !	24	1] 	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	31	10	100 1	1000	
STOMACH	(NO. EXAMINED) :	: (31)(0 (0	0)(32)	35)	
CYST	+ + + + + +	30 0 0	0000	0000	% 0 0 0	
DILATATION OF GASTRIC FAVEOLAE	FAVEOLAE + + + + + + + + + + + + + + + + + + +	0 0 3 8	0000	0000	34 0 0	
НЕМОЯЯНАБЕ	1 + + + + + + + + +	30 10 00	0000	0000	35	
INFILTRATION OF LEUCOCYTES	YTES + + + + + + + + + + + + + + + + + + +	53	0000	0000	3 t 0 0 0 1 1 t 1 1 1 1 1 1 1 1 1 1 1 1 1	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

	PERIOD(MONTHS) :		54		
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED	31	0 10 100 1000 31 33 31 35	100 1 31	 000 35
ILEUM (NO. EXAMINED) :	(NO. EXAMINED) :		31)(0)(0)(35)) (0	35)
		1)			
INFLAMMATION		30	00	0 0	
	•		0	00	0
	+	+++	0	0	0
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1 1 1 1	
1) GRADE : - , NEGATIVE; + , SLIGHT; ++	ATIVE; + / SLIGHT) ++ / W(DERAT	E; ++	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

24	10 100 1000 33 31 35	31)(0)(0)(35)		0 0 35	0	0	0	0	0	0 0 0	0	
	LEVEL (PPM) : 0 NO. NECROPSIED : 31	(NO. EXAMINED) : (31)(1)	- 30	+	0 +++		- 31	0 +		0 ++++	
	ORGAN FINDINGS	CECUM		GRANULATION				HEMORRHAGE				

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO: 83004

100 1000 31 35 34 (NO. EXAMINED): (31)(0)(35) 34 0000 10 31 31000 28 1 LEVEL (PPM) : NO. NECROPSIED : PERIOD (MONTHS) INFILTRATION OF LEUCOCYTES SUBMAXILLARY GLANDS FINDINGS FIBROSIS ORGAN

		FREQUENCY		IO OI	AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS	FEMALE
				ANIN	ANIMALS KILLED ON SCHEDULE	
1 C	PERIOD(MONTHS) :		76	1		STUDY NO. 83004
ORGAN FINDINGS NO	LEVEL (PPM) : NO. NECROPSIED :	31	10	100	1000 35	
UBLINGUAL GLANDS	CNO. EXAMINED) :	(31)(0 00) (0	35)	
	1	1)				
DILATATION OF DUCT	1 + -	31	000	000	34	
	+ + + +		00	00	000	
FIBROSIS	1 4	30	0 0	0 0	35	
	+ + + + + +	700	000	000	200	
	-	>	>	>		
HYPERPLASIA OF DUCTAL EPITHELIUM	HELIUM -	30	00	00	SS	
	+ + + + +	0 1 0	000	000	000	
INFILTRATION OF LEUCOCYTES	ľ	27	0	0	33	
	+	7	0	0	2	
	++	0	0	0	0	
	++++	0	0	0	0	
1) GRADE : - , NEGATIVE;			MODERATE:	+ + +		

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

14 - F - 1 - 18

TABLE

				TA	TABLE 14 - F - 1 - 19	
	J	CHRONIC	AND C	ARCIN OF M	CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT	
		FREQUEN	ENCY AND		DISTRIBUTION OF NON-NEOPLASTIC FINDINGS	FEMALE
				ANIMALS	ALS KILLED ON SCHEDULE	
	i	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 -	!		STUDY NO. 83004
	rekion (moniha) :	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	24	! ! !		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	31	10		1000 35	
PAROTID GLANDS	(NO. EXAMINED) :	(31)() (0	0 (0	35)	
	1)					
ATROPHY OF ACINAR CELLS		31	C	c	7'8	
	+	0	0	0		
	++	0	0	0	0	
	++++	0	0	0	0	
DILATATION OF DUCT	i	30	0	0	, .	
	+	۲	0	0	0	
	++	0	0	0	0	
	+ + + +	0	0	0	0	
SOCIETY TO MOTES OF LEGISLE	(,			
INTICIRATION OF LEUCOCYTES	I ES	56	0	0	32	
	+	Ŋ	0	0	23	
	+++	0	0	0	0	
	+ + +	0	0	0	0	
REGENERATIVE CHANGE	l	21	0	0	30	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FEMALE FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

		 	1	1	1		STUDY NO. 83004
	PERIOD(MONTHS)	••	,,,	5.4			! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		10	100	1000	O	
LIVER	(NO. EXAMINED)		J) (0	0)(3	35)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		1)					
ANGIECTASIA	•	- 29 + + 5 + + + 0	0000	0000		33 2 0 0	
CHOLANGIOFIBROSIS		26 + + + + 0 0	0000	0000		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
EXTRAMEDULLARY HEMATOPOIESIS		29 + + + + + 0	0000	0000		32 1 2 2 0	
FATTY DEGENERATION OF HEPATIC CELLS		- + + + + + + 0	0000	0000	16 * 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	* 9 0 0	
FOCAL ATROPHY OF HEPATI	HEPATIC CELLS	- 2 5 + + 2 6 + + + 3	0000	0000	21 8 0	. 180	

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

STUDY NO. 83004 FEMALE ANIMALS KILLED ON SCHEDULE

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PERIOD(MONTHS):	i	24			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	(PPM) : CROPSIED :	31	ł	100 10 31	1000 35	
CCONT	(CONTINUED) (CONTINED):	(31)(0 0)(0	35)	
	1)					
GRANULATION	1 + + + + + + + .	31	0000	0000	34 1 0 0	
немоякнабе	+ + + + + + +	30 1 0	0000	0000	35 0 0	
HYPERPLASTIC NODULE	1 + + + + + + +	50 00 00 00	0000	0000	29 3 3 0	
INFILTRATION OF LEUCOCYTES	7 T E S + + + + + + + + + + + + + + + + + +	12 17 0	0000	0000	23 12 0	
FOCAL NECROSIS	1 + + + + + + + +	30 0 0	0000	0000	31	

1) GRADE: - NEGATIVE; + SLIGHT; ++ NODERATE; +++ SEVERE.
* P<0.05

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

ш.	PERIOD(MONTHS) :		4	1		
_ Z	LEVEL (PPM) : NO. NECROPSIED :	31	33	100 1000 31 35	00	
l = ~	. ж	. ~) (0	0 0	35)	
O O	DDCT +++	5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0000	0000	28 7 0 0	
BILE DUCT	- + + + - + + - + + - + +	30 1 0	0000	0000	31 4 0	
	+ + + + + +	24 4 3	0000	0000	23 8 0	·
	' + + + + + +	30 1 0	0000			
	1 + + + + + +	17 13 0	0000	0000	20 13 2 0	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

STUDY NO. 83004 ANIMALS KILLED ON SCHEDULE

	1000	(35)		26	7	2	0	35	0	0	0		80	0	0	35	0	0	0
	100 1)(0)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54	10)(0)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	31	(31)(23	7	7	0	30	1	0	0	54	7	0	0	30	⊣	0	0
PERIOD(MONTHS) :	L (PPM) : NECROPSIED :	l	1)	1	+	++	++++	1	+	+++	++++		+	++	++++	1	+	++	++++
PERI	ORGAN LEVEL FINDINGS NO. NE	N)		ATROPHY OF PANCREATIC ACINUS				FIBROSIS				INFILTRATION OF LEUCOCYTES				REGERERATIVE CHANGE			

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - F - 1 - 24	CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT	FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS	ANIMALS KILLED ON SCHEDULE	
	CHRONIC A	FREQUENC		1

FEMALE

A.

				AN	ALS KI	ANIMALS KILLEU UN SCHEDULE	STUDY NO	. 83004
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PERIOD(MONTHS):	! ! ! !	24	1 1 1	 		! ! ! ! ! ! ! !	! ! ! ! ! !
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	31	10	100	1000			1
KIDNEYS	(NO. EXAMINED) :	(31)	(33)	31) ((32)			
	1)							
CALCIFICATION		Ŋ	80	Ŋ	2			
	+ +	5 ¢	22	56	28			
	+ + + +	00	0	00	0			
			* *	*				
URINE CAST	i	30	22	22	30		. • •	
	+ -	~ <	77	٥ (w c			
	+ + + + +	00	00	00	00			
			*	* *				
CHRONIC PROGRESSIVE	i	7	10	٥	7			
GLOMERULONEPHROPATHY	+ :	50	16	18	50 °			
	+ .+ + .	∧ ←1	o ←	÷O	00			
REGENERATIVE RENAL TUBULE	u	30	31	56	31			
	+ 4	₩ 0	~ 0	ın c	4 C			·
	- + - + +	0	0	0	0			
FIBROSIS	1 +	31	32	31	35			
	+ + + + +	00	00	00	00			

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05 ** P<0.01

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

	PERIOD(MONTHS):	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	76	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
		1 1	: 	1	1	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	. 31	10	100	1000	
IDNEYS	(CONTINUED) (NO. EXAMINED):	(31) (33) ((31)(35)	
	1	1)				
GLOMERULOSCLEROSIS	Ι +	30	33	31	. 34	
	- +	10	00	00	10	
	+ + + +	0	0	0	0	
HYALINE DROPLET DEGENERATION	RATION -	31	33	31	34	
			0	0	ţ -i	
	++	0	0	0	0	
	+ + + +	0	0	0	0	
HYPERPLASIA OF MUCOSAL EPITHELIUM	EPITHELIUM -	31	33	31	34	
	+	0 (0 (0 (₩.	
	+ + + + +	00	00	00	00	
					* *	
INFILTRATION OF LEUCOCYTES	YTES	7	9	7	16	
		27	56	27	19	
	++	0	7	0		
•	++++		0	0	0	
				** *	•	
PIGMENTATION	1	0	0	0	7	
	+	12	18	27	12	
	+ +	19	15	7	22	
	+++.		0	0	0	

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. ** P<0.01 *** P<0.001

- F - 1 - 26	NHALATION TOXICOLOGICAL STUDY IN FISCHER RAT
TABLE 14	O CARCINOGENIC IN OF METHANOL I
	CHRONIC AN

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

PERIOD(MONTHS) :	PERIOD (MONTHS)	••	24		
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIE		10	1	1000 35
KIDNEYS	(CONTINUED) (NO. EXAMINED)	: (31)	31)(33)(31)(35)	(31)	(35)
		1)			
THICKENING OF BASEMENT MEMBRANE	T MEMBRANE	- 31	33	30	34
	+	0 0 + ++	000	0 17	
	+ + + +		0	0	0
1) GRADE: - NEGATIVE: + SITGHT: ++ +	++ : LHULLS , + : HALLES		1 1 1 0 0	1 -	MONEDATE:

	STUDY
- 27	TOXICOLOGICAL BAT
14 - F - 1	INHALATION .
TABLE	CARCINOGENIC
	AND
	CHRONIC

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS FEMALE.

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

(NO. EXAMINED) : (30)(0)(35) 0 0 0 0000 LEVEL (PPM): NO. NECROPSIED: PERIOD (MONTHS) INFILTRATION OF LEUCOCYTES URINARY BLADDER FINDINGS HEMORRHAGE

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

		STUBY NO. 83002												•								
	FEMALE		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																			
CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT	FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS	ANIMALS KILLED ON SCHEDULE	 	0 10 100 1000 31 33 31 35	31)(0)(0)(35)		30 0 32 1 0 0 1 0 0 0 2	o o	0	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0	c	000	3 0 0 0 0 5	၁	0	2 0 0 0 3	00	,	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	0	0
CHR	F		PERIOD(MONTHS):	LEVEL (PPM) : NO. NECROPSIED : 3	EXAMINED) : (1)	1 + + + + + +		ı	+ +	+ + +	ı	+	+ :	+ + +	ı	+ +	· + · + +		1 +	++	++++
				ORGAN LEV FINDINGS NO.	OVARIES		АТЯОРНУ		CYST			FOLLICULAR CYST				INFILTRATION OF LEUCOCYTES				INCKEASE OF INTERSTITIAL CELLS		

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TABLE

	GICAL STUDY	C FINDINGS FEMALE	STUDY																		•				
E 14 - F - 1 - 29	CARCINOGENIC INHALATION TOXICOLOGICAL OF METHANOL IN FISCHER RAT	AND DISTRIBUTION OF NON-NEOPLASTIC	S KILLED ON SCHEDULE		0 0	5)					0					•									
TABLE	RCINOGE DF METE	DISTRI	ANIMALS	! ! !	100 1000 31 35				0 1			0 31		0 0			0 35							000	
				24	10 10) (0		0	0	0	0	0	0	0	0		00	0	0		0			000	
	CHRONIC AND	FREQUENCY		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	31	(31)(31	0	0	0	28	2	₽	0		0 0	0	~ 1	30) (0	76	, C	o c
	СН	u.		: (SHINOW)	(PPM) : CROPSIED :	NIW	1)	i		++	+ + +	I	+	+++	+ + +		1 +	- + +	+ + + +	I +	+ +	+ + + + +	1	l + :	+ + + + +
				PERIOD (ORGAN LEVEL CF FINDINGS NO. NECF	ERUS		CYSTIC ENDOMETRIAL HYPERPLASIA				DILATATION OF DUCT					HEMORRHAGE			HYPERPLASIA OF ENDOMETRIAL			THE THE TOTAL OF THE PROPERTY.	inficialion of Leocociles	

NO. 83004

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS FEMALE

ANIMALS KILLED ON SCHEDULE

35	35)		34	0	1	0	7.	20	~ 1	0	SEVERE
100 1000 31 ,35	(32) (0) (0) (32)				0	0	0	0	0	0	+ + + + · · ·
10 1 33) (0		0	0	0	0	0	0	0	0	MODERATE;
. 31	(31)(31	0	0	0	7	54	0	0	
LEVEL (PPM) : NO. NECROPSIED :	(CONTINUED) (NO. EXAMINED) : (31	1)		+	++	+ + + +	1	+	++	+++	1) GRADE : - , NEGATIVE; + , SLIGHT; ++ ,
ORGAN FIRDINGS	UTERUS		NECROSIS				PIGMENTATION				1) GRADE : -

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS KILLED ON SCHEDULE

	PERIOD(MONTHS) :		54			
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED	31	10		100 1000	
VAGINA	(NO. EXAMINED) :	$\overline{}$	31)(0)(60	0)(32)	
		1)				
HYPERPLASIA OF MUCOSAL EPITHELIUM	L EPITHELIUM	- 30		0	34	
		+ · · 1	0	0	0.	
	T			0	1	
	7	0 +++		0	0	
INFILTRATION OF LEUCOCYTES	CYTES	- 30		0	30	
		+ 1		0	'n	
	+	0 ++	0	0	0	
	+ + +			0	0	
		1	1	1	 	
1) GRADE :	GATIVE: + , SLIGHT		HODERA	TE: +	, MODERATE; +++ SEVERE	

TABLE 14 - F - 1 - 32

1.

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS KILLED ON SCHEDULE

	PERIOD (MONTHS)	THS):		54				! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		31	10 33	100 1	1000		
PITUITARY GLAND	(NO. EXAMINED)	NED) :	(31)(0) (0	0) (0	35)		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		1)						
CONGESTION		ı	30	0	0	33		
		+ :	, .	0 (0 (τ.		
		+ + + + +	00	00	00	0 13		
1								
CYST		ı	28	0	0	32		
		+	m (0	0	M		
		+ -	o c 	0 0	0 (0.		
		- -	>	>	>	D		
HEMORRHAGE		1	28	0	0	3.1		
		+	2	0	0	ı m		
		+++	7	0	0			
		+ + +	0	0	0	0		
MIGRATION OF HEMOSID	ERIN-LADEN	1	26	0	c	20		
CELLS		+	5	0	0	7		
		++	0	0	0			
		+ + +	0	0	0	0		
HYPERPLASIA OF CHROMOPHOBE CELLS	орнове сеггѕ	1 +	25	00	00	30		
		· +	1 4	0	0	2		
							-	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - F - 1 - 33

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

PERIOD (MONTHS) : 24 FINDINGS LEUEL (PAN) : 0 100 1000 FINDINGS LEUEL (PAN) : 0 100 1000 LIST STATE STATES ST			! ! !	! ! ! !	1			STUDY NO. 83004
HEMOSIDERIN-LADEN HEMOSIDERIN-LADEN TO THE TO TO TO TO TO TO TO TO TO TO TO TO TO		PERIOD (MONTHS)	••	1	24	1		
HEMOSIDERIN-LADEN - 30 0 0 0 + 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIE		31	! ! !		000	
1) - 30 - 30 - 4 + + 1 - 17 - 30 - 0 - 17	THYRDID GLANDS	(NO. EXAMINED)		(31)(0) (0	0) (0	35)	
- 30 - 30 - 1 + + + + 0 - 1 + + + + 0 - 30 - 0 - 0 - 0 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1			1)					
+ + + + + + + + + + + + + + + + + + +	MIGRATION OF HEMOSID	ERIN-LADEN	1 4	30	00	00	35	
LAR - 31 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	נפרר		+ +	- 0	00	00		
LAR - 30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			++++	0	0	0		
LAR + + 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	HEMORRHAGE		1	30	0	0	35	
LAR +++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			+	7	0	0	0	
LAR +++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			++	0	0	0	0	
LAR - 31 0 0 0 + + + 0 0 0 0 0 0 0 0 0 0 0 0 0		•	+ + +	0	0	0	0	
+ + + + + + + + + + + + + + + + + + +	YPERPLASIA OF FOLLIO	CULAR	1	31	0	0	34	
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	EPITHELIAL CELLS		+	0	0	0		
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			++	0	0	0	0	
- 17 0 0 + 13 0 0 ++ 1 0 0		•	+ + +	0	0	0	0	
13 0 0 0 0 0 0 0	HYPERPLASIA OF C-CELI	٦S	ı	. 17	0	0	20	
1 0 0			+	13	0	0	15	
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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

	100 1000	(25)		25	0	0	0	76	· · (1	0	0
54	10 100	(0) (0	0	0		0		0
	31 33	(52)(0)(0)(52)		22 0	0	1 0	0		0		0
PERIOD(MONTHS):	L (PPM) : NECROPSIED :	(NO. EXAMINED) :	1)		+	++	+ + +	ı	+	++	+ + + +
PERI				HYPERPLASIA OF CHIEF CELLS				INFILTRATION OF LEUCOCYTES			
	ORGAN FINDINGS	PARATHYROID GLANDS		HYPERPLA				INFILTRA			

3LE 1 OGENIC I ETHANOL	- F - 1 - 35	ALATION TOXICOLOGICAL STUDY	FISCHER RAT
TABLE AND CARCINOGENIC OF METHANOL	14	HNI	H
CHRONIC AND			F METHANO
CHRONIC		AND	
		CHRONIC	

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS FEMALE

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1000	35	32 2 1 0	a k o o k	34 0 0 1	34 1 0 0 0 0	m 20 C
24	10.0	31	22 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	3 31	3 M 3 M 3 O O O	31 0 0 0	31
! ! ! !	0 10		26 28 3 2 2 2 0 1	31 33 0 0 0 0 0 0	31 33 0 0 0 0	31 30 0 3 0 0	31 33
PERIOD(MONTHS):	PPM) : ROPSIED :	1)	+ + + + + +	1 + + + + + +	' + + + + + +	1 + + + + + +	1 +
PERIOD	LEVEL NO. NE	NO. NEO				EXTRAMEDULLARY HEMATOPOIESIS	
	ORGAN FINDI	FINDINGS	ANGIECTASIA	CONGESTION	CYST	EXTRAMEDULLARY	HEMORRHAGE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

, 1 ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	PERIOD (MONTHS)	: (8	! ! ! !	24	: 		: : : : : : : : : : : : : : : : : : :
ORGAN FINDI	LEVEL (PPM) NO. NECROPS	ED	31	10	100 1000 31 35		
ADRENAL GLANDS	(CONTINUED) (NO. EXAMINED)	: (0	(31)(33) (31) (35)	
		1)					
HYPERPLASIA OF	CORTIC CELLS	1 + + + + + + + + + +	31 0 0	33 0 0 0	30 0 10	35 0 0	
HYPERPLASIA OF	HYPERPLASIA OF GLOMERULOSA CELLS	+ + + + + +	30 1 0	32 1 0	28	35 0 0	
HYPERPLASIA OF MEDULLARY CELLS	YEDULLARY CELLS	+ + + + + +	30 10 0	32 0 0 0	26	34 1 0	
HYPERPLASTIC NODULE) UL E	1 + + + + + + + +	30	33	31 0 0	35 0 0	
INFILTRATION OF LEUCOCYTES	LEUCOCYTES	1 + + + + + +	25 0 0	5 4 0 0	6 2 0 0	31 4 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

					TABLE 14	F - 1 - 37			
		CHRONIC	IC AND	CARC	CARCINOGENIC IN OF METHANOL I	INHALATION TOXICOLOGICAL STUDY IN FISCHER RAT			
		FREG	FREQUENCY	AND D	DISTRIBUTION	I OF NON-NEOPLASTIC FINDINGS	FEMALE		
					ANIMALS KILLED	ED ON SCHEDULE		STUDY NO. 83004	. 7
	PERIOD (MONTHS) :	1	! ! !	24	; ; ; ; ; ;		! ! ! ! ! ! !	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	i ! !
ORGAN FINDINGS			0 10 31 33	100	1000				
ADRENAL GLANDS	(CONTINUED) (NO. EXAMINED)	· · · · · · · · · · · · · · · · · · ·	31)(33	33)(31)(; 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	i !
		1)							
MIGRATION OF MACROPHAGE	HAGE	ı							
	1		0 1	0	0		,		
		++							
	+	+ + +							
		Γ							
NECHOSIS									
		+ +			00				
	+	+ + +							
PIGMENTATION				31	35				
			100						
	-								
	+	+ + +							
VACUOLAR DEGENERATIO	ON OF CORTICAL	. 2			21				
CELLS		+ +	8 14	10	13				
	+				۰ 0				

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004 100 1000 31 35 (NO. EXAMINED) : (31)(0)(0)(35) 35000 0000 10 31 PERIOD(MONTHS): LEVEL (PPM) NO. NECROPSIED OSTEOSCLEROSIS HYPEROSTOSIS FINDINGS BONE (FEMUR) ORGAN

- ' NEGATIVE: + ' SLIGHT: ++ ' MODERATE: +++ ' SEVERE. 1) GRADE:

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				-	YOLE 14 1 1 1 3	
		CHRONIC	AND	ARCIN OF M	CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT	
		FREQUEN	ICY AN	SIQ Q	FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS FEMALE	ш
	•			ANIMALS	ALS KILLED ON SCHEDULE	STUDY NO. 83004
	PERIOD(MONTHS):	1 1 1 1 1		! ! !	111111111111111111111111111111111111111	
ORGAN FINDINGS	LEVEL (PPM): : NO. NECROPSIED :	31	10	100 1	1000 35	
SKIN		(31)() (0) (0	35)	
	1)					
EPIDERMOID CYST	4	30	0	0	34	
	+	0	0	0	0	
	++	7	0	0	0	
	++++	0	0	0	1	
FOLLICULITIS	1	31	0	0	34	
	+	0	0	0	0	
	++	0	0	0		
	+ + +	0	0	0	0	
SETVOCHES FOR MOTEVACTIVENT	0 1 1	c	c	•	1	
TILL TALLON OF LEGCO.	כוונס	22	5	5	รร	
	+	ω.	0	0	2	
	++	0	0	0	0	
	+++	0	0	0	0	
! ! ! !	1		1	!		
1) GRADE : - / NEG	✓ NEGATIVE; + ✓ SLIGHT; ++		/ MODERATE;	+++	+ / SEVERE.	

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INHALATION TOXICOLOGICAL STUDY	TVO
INHALATION	TN ETCCHED
C. AND CARCINOGENIC INHALATION TOXICOL	OF METHANO!
CHRONIC AND	

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS KILLED ON SCHEDULE

		!	! ! ! !	1 1 1 2		STUDY NO. 83004
	PERIOD(MONTHS) :		54			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
OPGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	31	10	10 100 1000		
SKIN (SUBCUTIS)	(NO. EXAMINED) : (31)(0)(0)(35)	(31)	0 (0)) (0	35)	
	1)					
INFILTRATION OF LEUCOCYTES	UCOCYTES -	30	0	0	35	
	+	7	0	0	0	
	++	0	0	0	0	
	+ + + +	0	0	0	0	
1) GRADE : - ,	- NEGATIVE: + SLIGHT: ++ .		DERAT	E; +++	MODERATE; +++ , SEVERE.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

	STUDY	
14 - F - 1 - 41	INHALATION TOXICOLOGICAL L IN FISCHER RAT	
TABLE	CARCINOGENIC OF METHANOL	
	AND	
	CHRONIC	

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

				¥	NIMAL	ANIMALS KILLED ON SCHEDULE	NO. 83004
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PERIOD(MONTHS)	!	1	24	 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED	31	10 10	!!!	100 1000	20	
MAMMARY GLAND	(NO. EXAMINED)	: (31)() (0	0)(35)	35)	
		1)			•		
DILATATION OF GLAND		١				33	
	+ :	+ -		0 0	0 (0,	
	++++				5		
HYPERPLASIA		- 2				08	
		9 +		0	0	7	
	++					-	
	+ + +					0	
NOT LEASTER AERONE		1					
		0	0		0		
	++						
	+ + +					0	
INFILTRATION OF LEUCOCYTES	YTES	- 29				25	
	+ +		0 0		00		
	· + · +					. 0	

				ANIMALS	ALS KILLED ON SCHEDULE	2010 011 201110	,
	PERIOD(MONTHS):	!	24	!		4000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	31	10 33	100 1	1000		
EYE BALLS	(NO. EXAMINED) :	(31)(0) (0) (0	35)		
	1)						
CALCIFICATION, SCLERA	1 +	. 28	00	00	33 2		
	+ + + + +	00	00	00	0		
CATARACT	ı	28	0	0	3.1		
	+ :	~ 0	0	0	1		
	+ + + + + +) t	00	00	·		
O T S O S H C T S O M H H		,	c	ď	;		
	1 4	7 0	> c	5	54		
	+ +	0	0	0	1 0		
	+ + +	0	0	0	0		
INFILTRATION OF LEUCOCYTES	16.5	2	c	c	7.0		
		2 4	0	0	0		
	+++	0	0	0			
	+ + +	0	0	0	0		
RETINAL ATROPHY		28	00	00	3.2		
	- + + + + +	. 0 .	000	000) H (
	 	V	>	>	7		

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FEMALE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

14 - F - 1 - 42

TABLE

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMÁLS KILLED ON SCHEDULE

STUDY NO. 83004

	PERIOD (MONTHS)	••		5.4						
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED			10 100 33	0 1000	0		 		
HARDERIAN GLANDS	(NO. EXAMINED)) : (31	<u> </u>) (0	0)(0	35)				
		1)								
GRANULATION		ı	31			M				
		+	0			2				
		++	0	0	0	0				
		+ + +	0			0				
HYPERPLASIA OF	GLANDULAR EPITHERIAL	- 30	0			۲.	٠			
CELLS	CELLS	+	1	0	0	0				
		++	0			0				
		+ + +	0			0				
HYPERSECRETION		ı	30			2				
	•	+	7							
		++	0	0	0	0				
		+ + +	0			0			•	
									•	
IMFILTRATION OF LEUCOCYTES	- LEUCOCYTES	- 1	17	0	0	20				
						2				
						C				
						•				

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

1 - 44	IN TOXICOLOGICAL STUDY	RAT
14 – F –	INHALATION T	IN FISCHER
IABLE	INOGENI	OF METHANOL
	AND	
	CHRONIC	

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FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS KILLED ON SCHEDULE

		1	1 1 1	1	1		STUDY NO. 83	83004
	PERIOD (MONTHS)			54				!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		31	10 1	100 10	1000 .35		
BRAIN	CNO. EXAMIN	 	(31)() (0	0)(0	35)		
		1)						
DILATATION OF CEREBRAL	CEREBRAL VENTRICLE	+ + + + + +	29	0000	0000	33 1 1 0		
6L10S1S	·	1 + + + + + + + + +	31 0 0	0000	0000	34 0 1 0		
MIGRATION OF HEMOSIDERIN-LADEN CELLS	N-LADEN	1 + + + + + +	30 1 0	0000	0000	34. 1 0		
HEMORRHAGE		1 + + + + + + + + +	30 0 0	0000	0000	3.5 0 0		
HYPERPLASIA OF EPENDYMAL CELLS		1 + + + + + + + +	30	0000	0000	35 0 0 0		

	TOXICOLOGICAL STUDY R RAT
- 45	TOXICO RAT
14 - F - 1	INHALATION IN FISCHEF
TABLE	CARCINOGENIC OF METHANOL
	AND
	CHRONIC

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS KILLED ON SCHEDULE

		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1	1		
	PERIOD(MONTHS) :		54		i	1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 31	10 1	0 10 100 1000 1 33 31 35		
BRAI	(CONTINUED) (NO. EXAMINED) (31)(0)(0)(35)	(31)() (0	(0)(35)		i
PIGMENTATION	1 + + +	1)	000	, * 11 0 0 24 0 0		
	++++	0	0	0 0		
		1 1 1 1 1 1 1	!	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

1) GRADE: - NEGATIVE; + SLIGHT; ++ NODERATE; +++ SEVERE. * P<0.05

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

27	
F - 1 -	
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TABLE	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS FEMALE

STUDY NO. 83004 ANIMALS KILLED ON SCHEDULE (NO. EXAMINED): (31)(0)(0)(34)
 10
 100
 1000

 33
 31
 35
 0000 0000 31 1) LEVEL (PPM) : NO. NECROPSIED : PERIOD(MONTHS) : FINDINGS OPTIC NERVE ORGAN EDEMA

14 - F - 2 - 1TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1 1 1	1	1	1								STUDY NO	83004
	PERIOD(DAYS			1-364	1	! ! !		365-5	-246	 	! ! ! ! !	547-743	743	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSI	 ED	0 1	10 1	100 1000	- 00	0 7	10	100 1	1000	19	10	100 1	1000	
HEART	×	: (0	1) () (0) (0	(0)	(1)) (0)	1) (0 (0	(19) ((19) (19) (17)	
		1)													
ENDOCARDITIS		. + +		000		000	400	000	400	000	18 1	19	19	17 0	
		+ + +	0	0	0	0	0	0	0	0	0	0	0	00	
FIBROSIS		I + + + + + +	0 1 0	0000	0000	0000	0100	0000	0400	0000	12 5	* 0 0 0 0	75 77 7	2 £ 5 0 0	
HYPERPLASIA OF ENDOCARD	ENDOCARDIAL CELLS	1 + + -	4000	0000	0000	0000	4000	0000	4000	0000	188	19	0 600	177	
INFILTRATION OF LEUCOCYTES	TES	+	. 4000	0000		0000	0000	0000	0 4000	0 0000	17. 0 0	13 0 0 0	0 1 0 0	0 17 0 0 0	
THROMBOENDOCARDITIS	·	I + + + + + +	0 0 0	0000	0000	. 0000	4000	0000	4000	0000	19	19000	18 0 0	17. 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

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TABLE 14 - F - 2 - 2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

			1 1 1 1 1 1 1	1 1 1 1 1 1 1	1 1 1 1 1	111111	1 1 1 1 1		111111	1 1 1 1 1	1	1		
	PERIOD(DAYS) :	1	1-364	7			365-546	97:			547-7	743	1 1 1 1 1 1	! ! !
ORGAN FIMDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 4	10	10 100 1000 0 0 0	! ! 0 0	101	10	0 10 100 1000 1 0 .2 0	0000	0 19	10 100 1000 19 19 17	100 1000 19 17	000	
THYRUS	(NO. EXAMINED) : (1)(0)(0)(0)	(1)() (0) (0	0)	(1),)(0)	(1)(0)(0)((0	(17)	(17) (19) (16) (17)	. 16) (17)	
	1)													
АТРОРНУ	+ + + + + +	. 000	0000	0000	0000	1000	0000	0000	0000	16 0 0	19 0 0	, 1, 0, 0,	17 0 0	
HYPERPLASIA OF EPITHELIAL RETICULUM CELLS	۱۲ + + + + + + +	1000	0000	0000	0000	. 0 0 0	0000	0000	0000	V 0 H 0	18 0 1	N 0 0 0	123 0	

14 - F - 2 - 3 TABLE

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Ÿ ځپه CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

STUDY NO. 83004 FEMALE ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

. ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	PERIOD(DAYS):	1 :	1-364				365-	546	: : : : : :	1 1 1 1 1	-245		: 	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 4	100	100	1000	1 1	10	100	1000	10	10	100	1000	
LYMPH NODES (SUBMAXI.)	(NO. EXAMINED) :	(1)() (0) (0	60	(1)((0)	(1)	60	(16)	(19)	(18)	(17)	
	1)													
ANGIECTASIA	1 +	t 0	00	00	00	40	00	← ←		16	19	18	16	
	+ + + + + + + .	00	000	000	000	000	000	000	000	,	000		0 4 0	
BLOOD ABSORPTION	1 + + + + + + +	0 0 0	0000	0000	0000	4000	0000	000	0000	12 0 0	0 0 0 0	18 0 0	17 0 0 0	
INFLAMMATION	1 + + + + + +	1000	0000	0000	0000	1000	0000	4000	0000	16000	19 0 0	17 0 0	17 0 0	
INCREASE OF PLASMA CELLS	1 + + +	1000	0000	0000	0000	4000	0000	1000	0000	11 0 0	18 1000	17 0 0	. 71 0 0 0	
LYMPHOCYTIC HYPERPLASIA	1 + + + + + +	. 0 10	0000	0000	0000	4000	0000	1000	0000	12 0 10 0	19	8 0 0 0	17 0 0	

TABLE 14 - F - 2 - 4

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

	1 1 1 1 1 1 1 1	1	; ; ;	 	1										STUC	STUDY NO. 83004
	PERIOD(DAYS) :			1-	1-364				365-546	65-546	1 1 1 1		54	547-743	! ! ! ! !	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		1	10	100	10 100 1000		. 0 4	0 10 100 1000 1 0 2 0	100	1000	19	0 10 100 1000 19 19 19 17	10 100	1000	
LYMPH NODES (SUBMAX	(CONTINUED) I.) (NO. EXAMINED)		ı	(0)()) (1)(0)(0)(0)	; ; ;	(1)	000	(1)	(1)(0)(1)(0)		6)(1	9)(1	(16)(19)(18)(17)	
		1)														
PROLIFERATION OF RETICULAR CELLS	ULAR CELLS	ı	~	0	_	0		←	0	Н	0	4-1	5			
		+	0	J	٠	0		0	0	0	0		0			
		+	0	Ç	٠	0		0	0	0	0		1 0	0	0	
	+	+++	0	J	_	0		0	0	0	0		0			
		; ; ;		1	1											

TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

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FREQUENCY

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KILLED	
OR	
DEAD	
FOUND	
ANIMALS	

	PERIOD(DAYS):		1-364			1*1	365-546	9			547-743	8	
g.S.	LEVEL (PPM) : NO. NECROPSIED :	10 1	10 100 1000 0 0 0	10 100 1000 0 0 0	100	0	10 1	0 10 100 1000 1 0 2 0	- 00	19	10 100 19 19	0 10 100 1000 19 19 19 17	
HdWA	(NO. EXAMINED):)(0))(0) (0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(1)(0)(0)(0)) (0) (0	0))(6)	12)((9)(12)(15)(7)	
	1)												
											¥		
BLOOD ABSORPTION	1	0			0				0		12		
	+	0	0	0	0	0	0	0	0	7	0	4 3	
	++	0			0				0		0		
	+ + + +	0			0				0		0	0	

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

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TABLE 14 - F - 2 - 6

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

		202-240	547-743
(NO. EXAMINED): (1) 1) ++00+++00		0 10 100 1000	0 10 100 1000 19 19 19 17
HON ++	: (1)(0)(0)(1)	0) (1)(0)(1)(0)	(17)(19)(18)(16)
HISTIOCYTOSIS - 1	0000	0000	17 18 18 16 0 0 0 0 0 1 0 0 0 0 0 0
0 0 0 + + + + + + + + + + + + + + + + +	- + + + + + + + + + + 0 0 0 0 0 0 0 0 0	0000	16 19 18 16 1 0 0 0 0 0 0 0 0 0 0 0
PROLIFERATION OF RETICULAR CELLS - 0 + 0 ++ 1 ++ 0 +++ 0	+ + + + + + + + + + + + + + + + + + + +	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	16 19 18 16 1 0 0 0 0 0 0 0 0 0

TABLE 14 - F - 2 - 7

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

		1 1 1 1	!		1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	! ! ! !						STUDY	NO. 83004
	PERIOD(DAYS) :	1	1-	-364	1		365	365-546		; ; ; ; ; ;	547-743	743	! ! ! !	
ORGAM FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 1	10	100	1000		1 0	100	1000	19	10	100	1000	
SPLEEN	(NO. EXAMINED) :	, 1	0	0)(0	(0) (0	J	1)(0	0)(0	2)(0)	(19) (1	19)(18)(. 17)	
	1)													
ATROPHY	1	Η.	0	0		•		2	0	18	19	16	13	
	+ + + +	000	000	000	000		000	000	000	400	000	0 4 4	0 m +	
			1)				>	>	o	5	Н	ч	
CALCIFICATION OF VASCULAR WALL		7	0	0		•		2	0	18	19	18	. 17	
	+ + +	00	00	00	0 0		00	00	00	₩ (00	00	. 0 0	
	+ + + +	0	0	0				0	0	00	00	00	00	
CAPSULITIS	ı	1	0	0	0	•		^	c	0	0	0	Š	
	+	0	0	0	0	. 0		0 1	0	0	0	9 0	0 4	
	+ + + + + + +	00	00	00	00	00	00	o	00	00	0 13	00	00	
CONGESTION	1 +		00	00	00	40		~ <	0 0	18	18	18	16	
	+ + +	000	000	000	000		000	000	000) H) H	00	00	
		>	>	>	>	D)	၁	0	0	0	↔	
EXTRAMEDULLARY HEMATOPOIESIS	POIESIS -	7	0	0	0		0	2	0	12	14	16	* 0	
	+ + +	00	00	00	00	00	00	00	00	٧ -	۲ ح	0 -	T K	
	+ + + +	0	0	0	0	0	0	0	0	0	2	٠,	1 4	

1) GRADE : - . NEGATIVE; + . SLIGHT; ++ . MODERATE; +++ . SEVERE. * P<0:05

TABLE 14 - F - 2 - 8

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DXICOLOGICAL	RAT
INHALATION TOXICOLOGICAL STU	IN FISCHER F
CHRONIC AND CARCINOGENIC	OF METHANOL IN FISCHER RAT
AND	
CHRONIC	

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN <u>EXTREMIS</u>

STUDY NO. 83004						
STUDY	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1000	. 17)		91 9040	004 50.
	743	10 100 1000 19 19 17	. 18) (0 0 0	75 0 W W
	547-743	10 100	19)(19)(18)(17)		6 0 0 0	13 0 3
	! ! ! !	10	(19)		19 0 0	5746
	 	0 10 100 1000 1 0 2 0	(0)		0000	0000
	949	100 1	0)(2)(0)		N O O O	1001
	365-5	10			0000	0000
		10 1	(1)(1000	1000
1		I	1 1 1 1			
1		1000	(0)		0000	0000
! ! !	24	10 100)(0)		0000	0000
1	1-364	0 10 100 1000 1 0 0 0	1)(0)(0000	0000
1		1 0	(1)		000	0 0 0 1
	PERIOD(DAYS) :	LEVEL (PPM) : NO. NECROPSIED :	(CONTINUED) (NO. EXAMINED) :	1).	' +	1 + + + + + + + + +
		ORGAN FINDINGS	SPLEEN		HEMORRHAGE	HEMOSIDEROSIS

TABLE 14 - F - 2 - 9

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

LEVEL (PPM): NO. NECROPSIED: (NO. EXAMINED): (NO. EXAMINED): +++ +++ +++ OW OF HEMOSIDERIN-LADEN - +++ +++ +++ +++ +++ +++ OF HEMOSIDERIN-LADEN	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1) : !	; ;	1	2	2 1 2					STUDY NO. 8	83004
CANOLESTARTINED : C 1)C 0)C 0)C 0)C 0 10 100 1000		DAYS)	 		1-364	1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		365-	546	1	 		547-7	743		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
(NO. EXAMINED) : (1)(0)(0)(0) (1)(0)(2)(0) (1)(1)(1)(1)(1)(1)(1)(1)(1)(GAN FINDINGS	LEVEL (PPM) NO. NECROPSIE		! ! ! !	!!!	0 10	100	! !	10	100	1000	1	ı	10		1000	
1) V OF HEMATOPOIESIS	МАЯЯОЫ	EXAMINED)		1)() (0) (0	(0	1	;	:	1	 	1	19) (17) (1	
ON HEMOSIDERIN-LADEN		1	1.														
OW FIRMOSIDERIN-LADEN FIFTH OF THE FOLLOWING STATES AND THE FOLLOWING S		+		1000	0000	0000	0000	4000	0000	0000	0000	•	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	10 10 10 17	11 23 1	14 0 2	
OW	CONGESTION	+ + + + + +		000	0000	0000	0000	000	0000	0000	0000		18 0 0	6000	16 0 1	17 0 0 0	
OW		1 + + + + + + + + +			0000	0000	0000	1000	0000	0000	0000		18 000	19 000	16 0	177 0 0	
OF HEMOSIDERIN-LADEN - 1 0 0 0 1 0 2 0 17 19 17	FATTY MARROW	1 + + +				0000	.0000	1000	0000	N000	0000		18 0 0	19 0 0	16 0 0	177 0 0	
	MIGRATION OF HEMOSIDERI CELLS	+ +				•		1000	0000	N O O O			17 0 1	19000	17 0 0	16 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - F - 2 - 10

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1 1 1 1	; ; ; ;								STUDY NO. 83004	7
	PERIOD(DAYS)	! ! !	1-	1-364			365-546	97	 	 	547-743	43		1
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		10	100	10 100 1000 0 0 0	10 1	1001	10.0 1000	00	19	10	100 1000	0000	
BONE MARROW	(CONTINUED) (NO. EXAMINED)	: (1	1)(0	0) (0	(0)(0	(1)() (0	2) (2	(0)	(18)	(18) (19) (17) (17) (17)	
		1)												
HISTIOCYTOSIS	•	← (0 0			₩.	0	2	0	17	19	17	17	
	+ +	- +	00	00	00	00	00	00	00	10	00	00	00	
	+ + + +		0			0	0	0	0	0	0	0	00	
HYPOHEMATOPOIESIS	S		0	0		₽	0	2	c	17	0	17	7	
	•		0	0	0	0	0	0	0	1	0	, 0	. 0	
	++	0	0	0		0	0	0	0	0	0	0) a	
	+++++	0	0	0		0	0	0	0	0	0	0	0 0	
PROLIFERATION OF RETICULAR CELLS	RETICULAR CELLS		0	0	0	H	0	2	0	18	19	16	17	
	+ +		00	00	00	00	00	00	00	00	00	40	00	
	++++	0	0	0	0	o ,	0	0	0	0	0	0	0	

TABLE 14 - F - 2 - 11

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

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TOW EXAMINED: : (1)(0)(0)(0)(0)(0)(2)(0)(1)(0)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1		PERIOD(DAYS):	1 	1 1 - 1	364	 		365-5	979			247-7	743	: : : : : : : :	
10N	ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED	!	10		7	101	100		000	0 19	10		17	
0N	NASAL CAVITY	E X A M I N E D)	J	0		: -	1	_	1	1	1	1	18)		
ON		1)												•	
- 1 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	CALCIFICATION	+ + + + + + + + + + + + + + + + + + + +	1000	0000	0000	0000	0 0 0	0000	N000	0000	18 0 0	6000	. 000	16 0 0	
OF MUCOSAL - 1 0 0 0 0 1 0 2 0 18 19 18 - 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CORGESTION	+ + + + + +	000	0000	0000	0000	1000	0000	0000	0000	18 0 0	14 0 0	18 0 0	91100	
OF MUCOSAL - 1 0 0 0 0 1 0 17 19 18 +++ 0 0 0 0 0 0 0 0 0 0 0 0 0 +++ 0 0 0 0	EDEMA		4000	0000	0000	0000	000	0000	0000		18 000	19 0 0	18000	1000	
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		+ + + + + +	000	0000	0000		1 0 0 0	0000	N000	0000	18 0 0	1990	18 0 0	10 0 10 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

STUDY NO. 83004 100 1000 19 17 (18)(19)(18)(17) 0000 1000 18000 5 9 6 0 547-743 10 0 2 0 ANIMALS FOUND DEAD OR KILLED IN EXTREMIS 6 100 1000 2 0 0000 0000 0)(2)(0000 365-546 10 0000 0000 0000 1)(0 4 000 000 6 100 1000 0 0 0000 0000 0)(0 0000 0000 0) 1-364 10 0000 0000 0000 1)(7 000 (NO. EXAMINED) : PERIOD(DAYS) LEVEL (PPM) NO. NECROPSIED (CONTINUED) INFILIRATION OF LEUCOCYTES

HYPERSECRETION

FINDINGS

NASAL CAVITY

- , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. 1) GRADE : ** P<0.01

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INFLAMMATION

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TABLE 14 - F - 2 - 13

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

CALCIFICATION OF VASCULAR WALL		PERIOD(DAYS)		: : : : :	1-364		! ! !	! ! ! !	365	365-546	1 1 1 1 1		! ! !	-245	-743	! ! ! !		
ATION OF GLAND	ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		1 0 1	100	00 1	00	1 1 1	!	i	100	ı	19	10	100	1000		
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OF VASCULAR WALL + + + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			1)															
10N OF GLAND	CALCIFICATION OF VA	SCULAR WALL	1	1	0	0	0						18	19	18	16		
TON OF GLAND			+	0	0	0	0	_					0	0	0	. ~		
TON OF GLAND - 1 0 0 0 0 1 0 2 0 18 16 18 +++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+	+ + +	00	00	00	00						00	00	00	00		
TON OF GLAND - 1							ı)	>))		
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F LEUCOCYTES - 1 0 0 0 0 1 0 17 +++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																		
0F LEUCOCYTES - - 1 0 <	HYPERSECRETION		ı	H	0	0	0	• •					18	19	17	16		
0F LEUCOCYTES - 1 0 <			+	0	0	0	0	~					0	0	+	⊣		
0f LEUCOCYTES			++	0	0	0	0	_					0	0	0	0		
OF LEUCOCYTES - 1 0 0 0 1 0 15 19 17 ++ 0		+	+	0	0	0	0	_					0	0	0	0		
OF LEUCOCYTES - 1 0 0 0 1 0 15 19 17 19 17 19 17 19 17 19 17 19 17 19 17 19 17 19 17 19 17 19 17 19 17 19 17 19 17 19 17 19 18 19 19 18 19 19 19 19 19 19 19 19 19 19 19 19 19																		
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		+	+	>	>	5	5	ر					>	>	5	>		

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

14 - F - 2 - 14TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FEMALE FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

(18)(19)(18)(17) 10 100 1000 19 19 17 547-743 ANIMALS FOUND DEAD OR KILLED IN EXTREMIS 6 10 100 1000 0 2 0 (1)(0)(2)(365-546 (NO. EXAMINED) : (1)(0)(0) 10 100 1000 0 0 0 1-364 PERIOD(DAYS) : LEVEL (PPM) NO. NECROPSIED

STUDY NO. 83004

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1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

INFILTRATION OF LEUCOCYTES

HYPERSECRETION

ORGAN FINDINGS

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TABLE 14 - F - 2 - 15

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CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

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STUDY NO	1 1 1		!							
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	1 4	100	19)(18)(. 0 0 1	M 20	0	17 0 1	18 0 0 0	18 0 0
	547-7	10	(19)		11 0	17 * 0 0 5 4 *	0	0 0 0	10 00 0	0000
	1	19	(19)(18 1000	11 0	0	18 0 1	18 0 0 1	000
S			(0)							
EXTREMIS		1000	2) (0		0000	000	0	0000	0000	0000
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	1	100) (0		0000	000	0	0000	0000	0000
ANIMALS	1-364	10) (0		0000	000	0	0000	0000	0000
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				1)	1 + + + + + + + +	1 + + +	+	1 + + + + + + + + + + + + + + + + + + +	1 + + +	+ + + + +
	^	LEVEL (PPM) NO. NECROPSIED	EXAMINEDO		+	•	+++++++++++++++++++++++++++++++++++++++	1 + + + + + + +	1 + + + + + + +	+ + + + + +
	PERIOD(DAYS	(PPI	EXAM			ب				
	PERIC	LEVEL NO. N				R WAL				
						VASCULAR WALL				
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		1			SI			EDEMA		7
		GAN FINDINGS			MATOS	FICAT		STIVE	3 T I O N	ATION
· ,		ORGAN	9		ADENOMATOSIS	CALCIFICATION		CONGESTIVE	CONGESTION	GRANULATION
i 1		- 'i	LUNG		•	-		J	J	ڻ ن

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. ** P<0.01

TABLE 14 - F - 2 - 16

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

	! ! ! ! ! ! !	1 1 1	1	! ! !	1 1 1 1	 								STUDY NO. 83004
	PERIOD(DAYS	: · · s	; ; ; ; ;	1-364	- 1			1 1] 	 	1 1 1 1 1	247-743	43	1
ORGAN FILDINGS	LEVEL (PPM) NO. NECROPSIED	: . IED :	. 0	10 1	100 10	0 1000	101	10	100	1000	19	10	100 1	1000
9xn7	TINUED) (NO. EXAM	ED):	(1)() (0	0 (0	(0)	(1)()(0)		0)	(19) (19) (19) (18) (17)	18) (17)
		1)												
НЕМОКЯНАБЕ		! + + + + + + +	000	0000	0000	0000	4000	0000	0000	0000	16 0 0	16 0 0	1 0 0 0	17. 0 0 .
HISTIOCYTOSIS		1 + + + + + +	4000	0000	0000	0000	1000	0000	1100	0000	H 0 0 1	* 6 0 0 0	15 3 0	12 5 0 0
INFILTRATION OF LEUCOCYTES	OCYTES	1 + + + + + +	000	0000	0000		. 0 0 0	0000	0000	0000	15	13 × 0 0 0 0	17 1 0	15 2 0
MIGRATION OF MACROPHAGE IN ALVEOLI	AGE IN ALVEOLI	1 + + + + + + + + +	1000	0000	0000	0000	1000	0000	0000	0000	10 0 0	19000	1 0 0	16 0 0
OSSEOUS TISSUE		+ + + + + +	4000	0000	0000	0000	#000	0000	N000	0000	18 0 0	. 118 0 0 0 0	18 0 0	17 0 0

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

		1	1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		1	1	SIUDY NO. 83004
	PERIOD(DAYS):	1	1-364	1-364 .	36	365-546		547-743
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	1 1 1 1	0 10 100 1000 1 0 0 0	1000	0 1	0 10 100 1000 1 0 2 0	1000	0 10 100 1000 19 19 19 17
ORAL CAVITY	J	0 0 0))(0	(0)(0)(0)(0)	(0)(0)(0)(0)	0)(0	(0)((0)(0)(1)(0)
	1)							
PYOGENIC STOMATITIS	ı	0	0		0			c
	+	0	0 0	0	0	0	0	o C
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	++++	0	0		0			0 0 1 0
		1						

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

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(NO. EXAMINED) : (1)(0)(0)(

HYPERKERATOSIS

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LEVEL (PPM) NO. NECROPSIED

FINDINGS

ORGAN

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1-364

PERIOD(DAYS) :

547-743

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

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	743	100	18) (18) (17) (, 0 0 0	17 0 0	17 0 0	1000
	547-743	10	(18)		18 0 0	18 0 0 0	18 00 0	18 0 0
	 	19	(18)		18 0 0	18 0000	18 0 0 0	17 0 1
		1000	(0		0000	0000	0000	0000
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1	365-546	10)(0)		0000	0000	0000	0000
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		101	(1)(000	4000	4000	4000
1		1000	(0		0000	0000	0000	0000
1	1	100) (0)		0000	0000	0000	0000
	1-364	10) (0)		0000	0000	0000	0000
1	1	0 7 1	(1)(000	1000	1000	000
	PERIOD(DAYS'):	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINED) :	1)	1 + + + + + + + + + + +	1 + + + + + +	1 + + + + + + + + + + +	+ + + + + +
	PERIOD	LEVEL NO. NE	(NO. E.				-EUCOCYTES	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		ORGAN FINDINGS	SТОМАСН		r O F M A	EROSION	INFILTRATION OF LEUCOCYTES	ULCER

14 - F - 2 - 20TABLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

STUDY NO. 83004 (15)(18)(16)(13) 10 100 1000 19 19 17 000 547-743 ANIMALS FOUND DEAD OR KILLED IN EXTREMIS (1)(0)(1)(0) 10 100 1000 0 2 0 000 365-546 0)(0)(0) 10 100 1000 0 0 0 0000 (NO. EXAMINED) : (1)(PERIOD(DAYS) : LEVEL (PPM) NO. NECROPSIED

ORGAN FINDINGS

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SEROSITIS

- / NEGATIVE; + / SLIGHT; ++ / MODERATE; +++ / SEVERE. 1) GRADE:

TABLE 14 - F - 2 - 21

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

		! ! ! !	i !				STUDY NO. 83004
	PERIOD(DAYS) :		1-364		365-546	365-546	547-743
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		10 10	10 100 1000	0 10 10	100 1000	0 10 100 1000 19 19 19 17
RECTUM	(NO. EXAMINED) :	1)() (0	(0)(0)(0)((1)(0)(1)(1)(0)	(16)(18)(16)(14)
	1)						
HEMORRHAGE	+ + + + + + +	1000	0000	0000	1000	0000	16 18 16 13 0 0 0 1 0 0 0 0 0 0 0 0
SEROS111S	1 + + + + + + + + + + + + + + + + + + +	1000	0000	0000	0 0 0 0	0000	16 18 16 13 0 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS FEMALE

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	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1	1	-	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1	1	1 1 1 1	 	1			STUDY NO. 83004
	PERIOD(DAYS)	•••		1-364				365-546	246		1 1 1 1 1 1	547-7	43	
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		_	10 1	10 100 1000	000	101	10	10 100 1000 0 2 0	000	19	10 100 1000 19 19 17	100 1	0000
SUBMAXILLARY GLANDS	(NO. EXAMINED) :	~ 	1)() (0	1)(0)(0)(0)	(0)	(1)	(0)	(1)(0)(1)((0	(18) (19) (18) (17)	. 19) (18) (17)
		1)												
ATROPHY OF ACINAR CELLS	+	+ + + + +	1000	0000	0000	0000	. 0 0 0	0000	1000	0000	17 0 1	0 0 0	18	17 0 0 0
GRANULATION	+ + + + + +		000	0000		0000	4000	0000	1000	0000	17 10 0	19	18000	. 17 0 0 0

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - F - 2 - 23

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

	PERIOD(DAYS):	1	1.	1-364				365-546	979			547-743	43		 	:
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	1		10	10 100 1000 0 0 0	!	101	10	100 1000	000	19	10 100 19 19	100 1000	0000 17		
SUBLINGUAL GLANDS	(NO. EXAMINED) :	-	1)() (0	(0)(0	: : : : :	(1)()(0	1)((0)	(18) (18) (18) (18) (18) (17)	17)		!
	1)				•											
ATROPHY OF ACINAR CELLS		7			0		₽	0	₩	0	17	18	18	17		
	+	0	0			_	0	0	0	0	0	0	0	. 0		
	++					_	0	0	0	0	0	0	0	. 0		
	+ + +	0					0	0	0	0	н	0	0	0		
INFILTRATION OF LEUCOCYTES	TES	7	J		0		-	0	-	0	8	ζ.	7 2	17		
		0	Ü				0	0	0	0	0	0		. 0		
	++	0	0		0		0	0	0	0	0	0	0	0		
	++++	0	0				0	0	0	0	0	0	0	0		

	STUD
14 - F - 2 - 24	INHALATION TOXICOLOGICAL IN FISCHER RAT
TABLE	CARCINOGENIC OF METHANOL
	AND
	CHRONIC

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FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004 100 1000 19 17 (18)(18)(18)(17) 0 0 0 547-743 18 6 10 100 1000 0 2 0 0000 0000 000 365-546 000 (NO. EXAMINED): (1)(0)(0) 10 100 1000 0 0 0 0000 0000 0000 0000 0000 0000 0000 PERIOD(DAYS): LEVEL (PPM) NO. NECROPSIED INFILTRATION OF LEUCOCYTES ATROPHY OF ACINAR CELLS VACUOLAR DEGENERATION REGENERATIVE CHANGE DILATATION OF DUCT PAROTID GLANDS FINDINGS

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS.

		. I		-	5 7 7 8	טא אורר בע	₹ -1	באותבייון	EMITS.				STUDY	NO. 83004	
	PERIOD(DAYS):		1-36	! ! .+	[; ; ; ; ; ;	365-546	! !	 	 	547-743	743			į
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	04	10	100 1	1000	0 1	10	100 1	1000	10 0 1	10	100 (1000		
LIVER	(NO. EXAMINED) :	(1)(0) (0	0) (0	(0)	(1)(0 0	!	(0	(18) ((19)((18)	17)	 	!
	1)														
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	+ + +	000	000	000	000	000	000	000	000	400			0 7 0		
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	++	0	0	0	0	0	0	0	0	00	0	0	-1 0		
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1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

		1 1 1 1 1 1	1	i i i i	; ; ; ; ;	1							STUDY	DY NO.	83004	
	PERIOD(DAYS) :	! ! ! ! !	1-364	1			365-546	546	1 	 	547-7	-743	1 1 1 1 1 1	 	1	1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	10	10	100 10	1000	1 0 1	100	100 1	1000	0 19	10	100 1	1000			
LIVER	EXAMIN	(1) (0 0) (0	(0	(1)()(0)	1)((0)	(18)(1	19)(18)((17)	1 1 1 1 1	1	1 1 1
	, 1)															
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	+ + + + + +	00	00	00	00	00	00	00	00	. .	00) ← (
								,	•	•)	>	>			
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	+	0	0	0	0	C	· c	· c) C	۰ د	1 <) \ 1	ں ٦			
	++	- 7-	0	0	0	0	o c	- ، د	o c	V V	o v	n t	Λ 4			
	+ + + +		0	0	0	7	0	0	0	- 4	٦ ٦	∩ (1	0 ↔			
FIBROSIS	ı	П	0	0	0	T	0	↔	0	17	19	18	16			
	+	0	0	0	0	0	0	0	0	₩.	0	0	~			
	++	0	0	0	0	0	0	0	0	0	0	0	0			
	+ + + +	0	0	0	0	0	0	0	0	0	0	0	0			
H HO VHOUBLE INJUS	O LIBO STEADAR	•	¢	•	c	,	,	•	(
		- C	o c	> c	o c	c	> c		o c	14	16	1,	10			
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	+ + + +	0	0	0	0	0	0	0	0	0	۰ ٥	0	10			
GRANULAR DEGENERATION	- NOIT	←	0	0		-	C	-	C	ζ.	10	ά	7.			
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	+	0 0	0 (0 0	0 (0 (0	0	0	0	0	0	0			
	+++	0	>	>	0	0	0	0	0	0	0	0	2			

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

7	!		!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!																			
83004	1 1 1 1 1 1 1																					
JDY NO	! ! ! !		1																			
STUDY		1000	(17)		16	7	00	17	0	0	0		10	~ (00	12	٣	2	0	16	7 0	0
	743	100	19)(18)(16		00	17	0	, ,	0		14	m .	- 0	17	₩	0	0	18	00	0
	547-743	10	(19)		19	0	00	18	0	, ,	0	*	19	0 0	00	16	⊣	2	0	19	00	0
	! ! ! !	19	(18)		17	⊣	00	18	0	0	0		12	7 (v 0	17	1	0	0	17	-10	0
	! ! ! !	1000	0		0	0	00	0	0	0	0		0	0 0	00	0	0	0	0	0 (00	0
	9	100 10	1) (↤	0	0 0	⊣	0	0	0		~ •	0 0	00	÷	0	0	0	₩.	00	0
	365-546	10	000		0	0	00	0	0	0	0		0	0 0	00	0	0	0	0	0 0	00	0
	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	0 4	(1)(1	0	00	1	0	0	0		← (0 0	00	۲	0	0	0	П (00	0
	! ! ! ! !	 00	(0)		0	0	0 0	0	0	0	0		0	0 0	00	0	0	0	0	0 0	00	0
	 	100 1000) (0		0	0	00	0	0	0	0		0 ()	00	0	0	0	0	0 0	00	0
1	1-364	10 1) (0		0	0	00	0	0	0	0		0 ()	00	0	0	0	0	0 0	00	0
1		0 4	1) (7	0	00	7	0	0	0		Η ()	00		0	0	0	₩ (00	0
1		¦. •• ••		1)	ı	+	+ + + + +	1	+	++	+++		1 -	+ -	+ + + + +	1	+	++	+ + +	1 -	+ +	+++
1	DAYS)	LEVEL (PPM) NO. NECROPSIED	EXAMINED)				+				+				+				÷		,	÷
1	PERIOD(DAYS	VEL CF																				
! ! !	PEI	LEVE NO.	(CONTINUED)										CYTES									
 			CCON)ULE					INFILTRATION OF LEUCOCYTES									
1 1								HYPERPLASTIC NODULE					0N 0F			SISC				NC		
1		GAN FINDINGS			HEMORRHAGE			PLAST					TRATI			FOCAL NECROSIS				PIGMENTATION		
 		ORGAN FIN	LIVER		HEMOR			HYPER					INFIL			FOCAL				PIGME		
i		i																				

1) GRADE : - / NEGATIVE; + / SLIGHT; ++ / MODERATE; +++ / SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FEMALE FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

		! ! !	! ! !) - -			7 1		5 1 1				STUDY NO	0.83004	
	PERIOD(DAYS	'	; ; ; ;	1-364	54			365-5	246		 	547-743	743	1 1 1 1 1 1 1 1	; ; ; ; ; ;	1
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSI		04	10	100 1	1000	104	100	100 1	1000	19	10	100 1	1000		
LIVER	M Z		(1)	60) (0)	(0)	(1)	000	1)((0	(18) ((19) ((18)	17)		! !
		1)														
PROLIFERATION OF B	BILE DUCT	ı	₽	0	0	0	त्न	0	٦	0	17	18	16	16		
		+ +	00	00	00	00	00	00	00	00	с 1 С	₩ (جا ج	~ (
		+++++	0	0	0	0	00	0	O (1)	00	00	0	→ 0	00		
PROLIFERATION OF B.	BILE DUCT .	t	1	0	0	0	H	0	₽	0	17	19	17	17		
WITH FIBROSIS		+ +	00	00	00	00	00	00	00	00	₩ (00	~1 €	00		
		- + - + +	0	00	00	0	00	00	00	00	00	00	00	00		
PROLIFERATION OF KU	KUPFFER CELLS	1	+	o,	0	0	€1	0	٠ ج	0	17	19	18	17		
		+	0	0	0	0	0	0	0		0	0	0	0		
	·	+ + + + +	00	00	00	00	00	00	00	00	7	00	00	00		
000		1	c	c	c	c	•	c	•	c	٦	7	*	c		
		۱ +) H	0	0	00	→ 0	0	00	0	· 9	1.5	1.5	> v		
		+ :	0 0	0 (0 0	0 0	0 (0 (← (0 (ι ς (2 0	~ (M		
	•	+ + +	5)	o	ɔ	0	ɔ	o	ɔ	0	ɔ	o	0		
SWELLING OF KUPFFER	R CELLS	1	↤	0	0	0	П	0	₽	0	18	19	18	16		
		+ ;	0 (0 0	0 (0 (0 0	0 (0 (0 (0 0	0 0	0 (←1 (
	T	+ + + + +	00	00	00	00	00	0 0	ာ ဝဲ	00	00	00	00	00		

1) GRADE: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

	PERIOD(DAYS):		÷	1-364		• 	365-546	546	; ; ; ; ;	 	547-743	743		
ORGAN FINDINGS	۵	; ! !	1(0 10 100 1000 1 0 0 0 0	1000	1001	10	0 10 100 1000 1 0 2 0	00001	19	10	0 10 100 1000 19 19 19 17	50 17	
	DN C	_)) (0) ((1)(0)(0)(0)	(1)	(0)	(1) (0) (1) (0)	(0)	(18)	(19) ((18)(19)(18)(17)		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
MACROPHAGE MIGRATION IN PERIVASCULAR AREA	-		0000	0000		4000	0000	4000	0000	11 2 2 0	13 *	* & 0 0 0	12 4 1 0	

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TABLE 14 - F - 2 - 30

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

				ANIMALS	S FOUND	DEAD	OR KILLED	LED IN		EXTREMIS				ŞTUDY	NO. 83004
	PERIOD(DAYS		 	1-364	! ! !	 1 1 1 1 1	} {	65	9	 	! ! !	-27	1	! ! ! ! !	; ; ; ; ; ; ;
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED	ED : .	101	100	100 1	 00 0	100	10	100 1	1000	19	100	100 1	000	
PANCREAS	0. EXA		(1)	60) (0)	(0)	(1))(0)	(1)((0)	(16)((18)	(16) (16)	1 1 1 1 1 1 1 1 1 1
ATROPHY OF PANCREATIC ACINUS	SUNUS	+ + + + + + + + + + + + + + + + + + + +	1000	0000	0000	0000	4000	0000	1000	0000	13 8 0 0	120	0 0 0	0 10 10 0	
DECREASE OF ZYMOGEN GRANULES	NULES	1 + + + + + + + +	1000	0000	0000	0000	4000	0000	4000	0000	16 0 0	18 0 0	15 0 1	91 0 0 0	
ENLARGEMENT OF LANGERHANS' ISLAND	NS' ISLAND	1 + + + + + + + +	1000	0000	0000	0000	1000	0000	4000	0000	16 0 0	18 0 0	1 0 0 0	10 0	
FIBROSIS		1 + + + + + + + +	4000	0000	0000	0000	1000	0000	4000	0000	12 0 0	18 0 0	91 0 0	16 0 0	
HEMORRHAGE		+ + + + + + +	. 4000	0000	0000	. 0000	4000	0000	4000	0000	97 000	18 0 0	9000	10 0 0 0 0 0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - F - 2 - 31

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

	PERIOD(DAYS) :		1-364	! ! ! ! ! !	: : : : : : :	365-546	9	i ! ! !	1 1 1 1 1	547-743	43	; ! ! ! ! ! !	; ; ; ;
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 7	10 1	10 100 1000 0 0 0	0 7	10 1	100 1000	. 00	19	10	100 1000 19 17	000 17	
PANCREAS	(CONTINUED) (NO. EXAMINED):	(1)() (0	(0)(0	(1)(0 00	1)((0	(16)	(16) (18) (16) (16	16)(16)	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
	1)												
INFILTRATION OF LEUCOCYTES	:UCOCYTES -	1 0	00		₩ 0	00		00	14	18	16	15	
	+ + + + +	000	000	000	000	000	000	000	V O O	000	000	-100	
REGENERATIVE CHANGE	l +	00	00		₩ (0 0		0 (16	18	17	16	
	+ + + + +	010	000	000	000	000	000	000	000	000	000	000	
SEROSITIS	! + + + + + +	1000	0000	0000	4000	0000	1000	0000	1000	8000	9000	15 0 1	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

			83004										1 1 1 1 1 1 1
			STUDY NO	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- 0 ~	17)		, 4woo	1,400	m m -1 0		•	1 1 1 1 1 1
		FEMALE		743	100 1000	(19) (116 00 11	10 0 0	11 8 5 8 0 1 3 0	19 17 0 0 0 0 0 0	19 17 0 0 0 0	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
					10	(19)		7 0 0 0	40 00 00	11 4 4 11	19 0 0	18 0 1	1
	STUDY	FINDINGS		 	19	(18)		15000	12 6 0	8 7 7 7	18 0 0	18 0 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	TOXICOLOGICAL RAT		REMIS	1	1000	(0)		0000	0000	0000	0000	0000	!!!!!!!!!!!
32	OXICOI RAT	NON-NEOPLASTIC	w	1	100 1	(2) (0000	0077	4040	0000	0000	1
- 2 -	ALATION TO FISCHER	ON-NE(H	5 1	10	000		0000	0000	0000	0000	0000	1 1 1 1
14 - F	H N I	0 F	OR KILLED	 	1 0 1	(1)		0000	4000	0 0 1 0	4000	1000	1 1 1 1 1 1 1
TABLE	RCINOGENIC I DF METHANOL	DISTRIBUTION	FOUND DEAD	1 1	1000	(0)		0000	0000	0000	0000	0000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
-	CARCI OF			-364	100	60		0000	0000	0000	0000	0000	1
	AND	UENCY AND	ANIMALS	1-3	1	60		0000	0000	0000	0000	0000	
	CHRONIC	FREQUE			1 10	(1)		1000	1000	4000	0001	000	1
	S		. !	CDAY	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINED) :	1)	1 + + + + + + + + +	1 + + + + + + + +	+ + + + + + + + +	! + + + + + +		
					ORGAN FINDINGS	KIDNEYS		CALCIFICATION	URINE CAST	CHRONIC PROGRESSIVE GLOMERULONEPHROPATHY	CONGESTION		

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1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - F - 2 - 33

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS FEMALE

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	PERIOD(DAYS):	! ! !		-364			 		-546	l I	! !	! ! ! !	547-7	743	 	; ; ; ; ; ; ;	!
	LEVEL (PP NO. NECRO		-	0 100	1000	!	101	100	100	1000		19	10	100	1000		
IDNEYS	INUED) (NO. EXAMI	· · · · · · · · · · · · · · · · · · ·	1)(()) (0	0)(0	(0)	- 1	1) (0)	0) (2)	(0) ((18)((19)((19) ((17)		
	1)																
REGENERATIVE RENAL TUB	TUBULE -	(Н	0	2	0		12	16	15	13		
	+ +	00	00		00		00	00	00	00		७०	мо	W =	40		
	++++	J					0	0	0	0		0	0	0	0		
GLOMERULOSCLEROSIS	ı	H					[-1	0	2	0		18	18	17	, 16		
	+ +	00	00	00	00		00	00	00	00		00	с С	∾ ⊂	~ ○		
	+ + + +	0					0	0.0	0	0		0	0	00	0		
HYALINE DROPLET DEGENERATION	RATION	7					7	0	~	C		7	9	0	7		
	+ :	0 0	0 0	0 (0		0	0	0	0		. ~-1	0	0	0		
	+ + + + +	00					00	00	00	00		00	00	00	00		
HYPERPLASIA OF RENAL TUBULES	UBULES	-					-	0	2	0		200	9	40	7		
		0 0	00	00	00		00	00	00	00		00	00	0	0,		
	+ + + + + +	00					00	00	00	00		00	00	00	-10		
	(i	•		•			•	•	(•		,	•	•	,		
INFILIRATION OF LEUCOCYTES) +	0 1	00	00	00		0 1	00	0 0	00		12	13	15	13		
	+ + +	00		00			00	00	00	0 0		00	00	00	00		
	+++	>		>			כ)	>	>		5	>	כ	>		

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - F - 2 - 34

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

						,	174	N1	CALACITA	CTLIS				
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1	1 1	1 1 1	1	1	: : :						STUDY NO. 83004
	PERIOD(DAYS	: (S,	 	1-364	7			365-546	7.6	 	1 1 1 1 1	547-74		
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED	: :IED :	0 4	10	100 1000	! ! 00	100	10	100 1000	000	19	10 100 19 19	100 1000 19 17	 500 17
KIDNEYS		1ED): (1) (0 0) (0	(0	(1)()(0)	2) ((0	(18)(19)(19)(17)	19) (19)(17)
INTERSTITIAL NEPHRITIS	RITIS	1 + + + + +	000-	0000	0000	0000	. 000	0000	2000	0000	18 0 0	19 0 0	1 0 0 0	17 0 0 0
PIGMENTATION		! + + + + + +	. 0 0 0	0000	0000	0000	0 0 0 1	0000	0 1 0 1	0000	14074	4 9 9 W	17 0 * 0 5 4 0 *	1 7 7 1
THICKENING OF BASE	BASEMENT MEMBRANE	1 + + + + + +	1000	0000	0000	0000	4000	0000	N O O O	0000	1 2 0 0 0	19	18 10 0	14 3 0 0

1) GRADE : - . NEGATIVE; + . SLIGHT; ++ . MODERATE; +++ . SEVERE. * P<0.05

TABLE 14 - F - 2 - 35

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

	PERIOD(DAYS):		1-364	94	! ! !		365-546	! !	! ! ! ! !	 	547-743	43	 	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		10	100 1000	000	0 1	10	100 1000	1000	1001	10	100 1000	000	
URINARY BLADDER	(NO. EXAMINED) :	(1)	0 0	0 0 0	(0	(1)()(0)	(1) ((0	(11)	17)(18)(18)(16)	18)(16)	
	1)													
CALCULOSIS	1 +	t1 C	00	00	00	↔ (00	₩ (00	17	17	18	16	
	+	0	0	0	00	0	0	0	0	0	o -	> C	> C	
	+ + + .	0	0	0	0	0	0	0	0	0	0	0	00	
INFILTRATION OF LEUCOCYTES	TES -	7	0	0	0		0	€	0	15	18	18	4	
	+	0	0	0	0	0	0	0	0	2	0	0	0	
	++	0	0	0	0	0	0	0	0	0	0	0	0	
	++++	0	0	0	0	0	0	0	0	0	0	0	0	
INFLAMMATION	1 -	₩ (0 (0 (0 (₩.	0	Α,	0	16	18	18	16	
	+ + + + + +	000	000	000	000	000	000	000	000	- 0	000	000	000	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

		! ! ! !	1	1	! ! ! !								STUDY	ND. 83004	70
	PERIOD(DAYS) :	; ; ;	1 - 1	-364				97	; ; ; ;	! ! ! !	547		! ! ! ! !	1 1 1 1	1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	 	10	100	1000	0 1	10	100 1	1000	19	10	100	1000		
OVARIES	(NO. EXAMINED) :	(1)(0 0 0)(0)	(0)	(1)() (0)	0 (0	(0	(18) ((18)	(18)((17)	 	
	1)														
ATROPHY	1 -	₩ (0 (0 (0	Н	0	0	0	14	* &	16	. 16		
	+ + +	00	00	00	00	00	00	00	00	~ ~	00	<u>ر</u> د	00		
	+ + + +	0	0	0	0	0	0	0	0	0 0	0	00) (1		
CONGESTION	ı	₩	0	0	O	-	c	c	c	0			ţ		
	+	0	0	0	0	0	0	0	0	0 0	0 0	ο C	16		
	++	0	0	0	0	0	0	0	0	0	0	0	o		
	+ + + + .	0	0	0	0	0	0	0	0	0	0	0	0		
CYST	I	Ħ	0	0	0	Н	0	0	c	ζ.	ζ	7	7		
	+	0	0	0	0	0	0	0	0	o c	9 0		· C		
	+ + + + + +	00	00	00	00	00	00	00	000	000	000	100	000		
)	•)		>	>	>	>	>	5	5		
FOLLICULAR CYST	1	7	0	0	0	₽	0	0	0	17	8	7	17		
	+ +	0 0	00	00	00	00	0 0	00	00	. ~ (00	2 ~ .	0		
	+ + + +	0	0	0	00	00	00	00	00	00	0.0	00	00		
i C	,														
inficiration of Leucocytes	. Y T E S +	0 17	00	00	00	0 17	00	00	00	17	18	18	16		
	+ -	0 (0 0	0 0	0 (0	0	0	0) (1	0	0	• 0		
	+++++)	>	ɔ) O	0	0	0	0	0	0	0	0		

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. * P<0.05

TABLE 14 - F - 2 - 37

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

														STUDY NO BROOK
	DAYS)	! ! !	!	1-364	· · · · · · · · · · · · · · · · · · ·	 	! ! ! !	365-	.546		 	547-743		
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED	ı 	0 1	10	10 100 1000 0 0 0	000	0 1	10	100	0 10 100 1000 1 0 2 0	19	10 100 1000	100 1	000
OVARIES	(CONTINUED) (NO. EXAMINED):	¦	1)()(0)((0)(0	(0)	(1)((0)	(0)(0)(0	(0)	(18) ((18)(18)(18)(17)	18)(17)
		1)												
INCREASE OF CORPUS LUTEUM	ORPUS LUTEUM . + + + + + + + + + + + + + + + + + +	1 + + -	1000	0000	0000	0000	4000	0000	0000	0000	80 O C	18000	16 17 1 0 1 0	17 0 0
)	>	>	Þ	0		o	0
INCREASE OF IN	INCREASE OF INTERSTITIAL CELLS + +++		4000	0000	000	000	400	000	000	000	18 0	18 0 0	18 0	14 1 2
	++++		5	0	0	0	0	0	0	0	0			10

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

Decan Deca			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	!	1 1	1 1				2				STUDY NO.	83004
FINDINGS LEVEL (PPM) : 1 10 100 1000		^	.	1-36	- 1			365-5	7 9 7		 	547	-743	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
TEMUS 1) 11 12 13 14 15 17 18 18 18 19 19 19 19 19 19 19	0 8	LEVEL (PPM) NO. NECROPSIED	0 1	10	00 1	000	! !	10		000	19	10	100	1000	
OF DUCT - + + 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0	UTERUS	EXAMINED)		0 (0			(1)	!	i i	1	(18)((18)((18)(. 17)	1 1 1 1 1
OF DUCT - + + + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1)													
1S - 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 F	1 -	₩ (0	0	0	П	0	⊣	0	16	16	16	13	
IS - 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+ + +	000	000	000	000	000	000	000	00	~ ~ .	44	ल स	1 2	
IS - 1 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0		-	>	>	>	o	0	>	0	0	0	0	0	1	
OF ENDOMETRIAL - 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	HEMORRHAGE	1	₽	0	0	0	₽	0	₽	0	18	17	£1 80	17	
OF ENDOMETRIAL - 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+ -	0 0	0 (0	0 0	0	0	0	0	0	7	0	0	
OF ENDOMETRIAL - 1 0 0 0 0 1 0 1 0 0 +++ 0 0 0 0 0 0 0 0 0 +++ 0 0 0 0		+ + + + + + .	00	00	00	00	00	00	00	00	00	00	00	0.0	
OF ENDOMETRIAL	HISTIOCYTOSIS	1	-	c	c	c	•	c	7	c	,		,	·	
OF ENDOMETRIAL - 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+	0	0	0	0	- O	0	۰ ٥	0	7 -	φ C	Σ C	1 /	
OF ENDOMETRIAL + 1 0 0 0 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0		+ + + + +	00	00	00	00	00	00	00	000	100	000	000	000	
- 1 0 0 0 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0	ı														
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2		с 1 С	0 0	00	00	₩ 0	00	~ ⊂	00	18	18	18	16	
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		+	0	0	0	00	00	00	00	00	0	0	00		
+ + + + + + + + + + + + + + + + + + +		+ + + +	0	0	0	0	0	0	0	0	0	0	0	0	
	INFILTRATION OF LEUCO		-	c	c	C	-	c	~	c	7	7	r u	r.	
			0	0	0	0	0 0	0	۰ ٥	00	, T	7 7	J W	57	
		+ + +	0 0	0 0	00	0 0	00	0 0	0 0	0 0	0 0	0 0	0 (0 (
		++++	>	>	>	5	0	>	5	5	0	0	0	0	

1) GPADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

	PERIOD(DAYS) :	1-364	365-546	547-743
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	10 100 1000 0 0 0	0 10 100 1000 1 0 0 0 0 0 0 0 0 0 0 0 0	0 10 100 1000 19 19 19 17
	(CONTINUED)	(0)(0)(0)	(1)(0)(1)(0)	(18)(18)(18)(17)
PIGMENTATION	1)	0000	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	*** 7 18 8 8 11 0 10 9 0 0 0 0 0 0 0 0

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. *** P<0.001

TABLE 14 - F - 2 - 40

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

													NO CO ON VOITS
	PERIOD(DAYS) :	 	1-364	7,		 	365-546	9		1	547-743		. !
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	10	10	100 1	1000	1	10 1	100 10	1000	19	10	100	1000
VAGINA		(1))(0)) (0	(0)	(1) () (0	1) (0)	(17) (19) (17)	17)
	1)	^											
АТВОРНҮ	1 -	↔ (0 (0	0	₽	0	↩	0	16	19	17	71
	+ + + + + +	000	000	000	000	000	000	000	000	010	000	000	, H N O
DILATATION OF DUCT	į	₽	0	0	0	-	c	+	c	į			!
	+ + + + + + +	000	000	000	000	1000	0000	-000	0000	<u>`</u> 000	2000	0 + 0	17 0 0
HYPERPLASIA OF MUCOSAL	EPITHELIUM	τ-	c	c	c	•	ć		,)	
	+ +	100,0	0000	0000	0000	-000	0000	000	0000	120	19 000	17 0 0	17 0 0 0
INFILTRATION OF LEUCOCYTES	YTES + + + + + + + + + + + + + + + + + + +	0 0 0	0000	0000	0000	#000	0000	4000	0000	12 5 0	19 * 0 0 0	15.00	16 0 0
INFLAMMATION	+ + + + + + .	1000	0000	0000	0000	0 7 0 0	0000	1000	0000	17 0 0	19 0 0	17 0 0 0	17 0 0 0

1) GRADE : - / NEGATIVE; + / SLIGHT; ++ / MODERATE; +++ / SEVERE. * P<0.05

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

		1 1	1	!	1 1 1	1	1						STUDY	NO. 83004
	PERIOD(DAYS) :	! ! !	1	-364	! ! !		365-546	949	! ! ! !	; ! ! ! !	547-743	.43		; ; ; ; ; ;
ORGAN FINDINGS			10	100	100	0 1	10	100 1	1000	19	10	100 1	1000	
PITUITARY GLAND	(NO. EXAMINED) :	(1		0) (0	(0)(0)	(1) ()(0)	1) (1	(0	(18)(18)(17)(16)	
	1	1)												
CONGESTION	1 + + + + + + +	1000	0000	0000	0000	1000	0000	1000	0000	18 0 0	15 0 0	17 0 0	16 0 0	
CYST	! + + + + + +		0000	0000		1000	0000	4000	0000	18 0 0	17 0 0	14 0 0 7 7 7 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9	16 0 0 0	
HEMORRHAGE	1 + + + + + + + + + + + + + + + + + + +	1000	0000	0000	0000	0 0 0	0000	4000	0000	113 5 0	15 2 1	14 1 0	12 2 0 0	
MIGRATIOM OF HEMOSIDERIN-LADEN CELLS	N-LADEN - + + + + +	0040	0000	0000	0000	1000	0000	4000	0000	1 3 0 0	15000	14 0 0	13 0 0	
HYPERPLASIA OF CHROMOPHOBE	OBE CELLS +++	4000	0000	0000	0000	1000	0000	1000	0000	14 2 2 0	10 11 0	120	11. 0 0 %	·

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

FEMALE

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1	1 1 1 1	1 1 1 1 1 1		1 1 1 1 1	1 1 1	1	1	1		
	PERIOD(DAYS) :		1-364	.+		365-546	246			547-743	43	! ! ! ! ! !
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	101	100	0 10 100 1000 1 0 0 0	1	0 10 100 1000 1 0 2 0	100 10	0000	19	0 10 100 1000 19 19 19 17	100 1(00
GLAND	I Z	(1)()(0	0) (0		(1)(0)(1)(0)	(1)((0)	(18)(18)(17)(16)	18) (17) (16)
	1)											
HYPERTROPHIC CHANGE	G.E		0	0 0	,,	1 0	₽	0	18	18	17	15
	+	0	0	0	0			0	0	0	0	
	++	0	0	0	0			0	0	0	0	0
	++++	0	0	0 0	0			0	0	0 0	0	0
1) GRADE : -	NEGATIVE; + , SL	OW \ ++	DERAT	\ +++ \:	SEVERE.	1	1		! ! ! !	1 1 1 1 1		: : : : : : : : : : : : : : : : : : : :

TABLE 14 - F - 2 - 43

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

	PERIOD(DAYS):		1-364	7			365-546	91	 	! ! ! !	547-743	43	
ORGAN FINDINGS	SIED:	1	10	100 1000	1 0 0	1 0 1	10 1	100 1000	00	19	10	100	 1000 17
THYROID GLANDS	(NO. EXAMINED) : (1)	(1)() (0) (0	(0)	(1)() (0	(1)(((0	(18)	18)(18)(17)(15)	17) (15)
	1)												
ENLARGEMENT OF FOLLICLE	1	Н	0		0	↔	0		C	ξ.	17		7.
	+	0	0		0	0	0			0			† C
	+++	0	0	0	0	0	0		0) C	· -) -
	+ + + +	0	0		0	0	0	0	0	0	0	00	· 0
HYPERPLASIA OF C-CELLS	1	- (0	0	0	Ţ	0		0	12	15	13	11
	+ :	0 (0 (0	0	0	0	0	9	2	7	7
	++	o .	0		0	0	0		0	0	0	0	0
	++++	0	0		0	0	0		0	0	0	0	0
		1	1	!	1	; ; ; ; ;	1 1 1 1	1					

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - F - 2 - 44

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FINDINGS
NON-NEOPLASTIC
DISTRIBUTION OF
FREQUENCY AND

FEMALE

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ANIMALS

	PERIOD(DAYS):		1-364	÷		36.	365-546			547-743	743		
ORGAN FINDINGS		0 1	10 0	10 100 1000 0 0 0 0	1	0 1(10 100	0 10 100 1000 . 1 0 2 0	19	10. 10	100	1000 17	
ID GLANDS		0 (0)) (0	0) (0	1	1)(()) (0	(1)(0)(0)(0)	(14)((14)(8)(13)(9)		
	1)												
HYPERPLASIA OF CHIEF CELLS	CELLS	0	0						13			0	
	+	0	0	0 0		0	0	0	0			· C	
	++	0	0						-			0 0	
	++++	0	0						0	0	0	0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - F - 2 - 45

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FINDINGS	
NON-NEOPLASTIC	
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DISTRIBUTION OF	
AND	
FREQUENCY	

FEMALE

83004			 																
STUDY NO.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 ! ! ! ! !																
STL		1000	(16)		13	~ ∩	0	15	0	۰، ٥	13	m (00	1.6	+ +	7	0	14	0 11 1
	43		18)(17)(17		00	16	0	H 0	17	00	00	17	0	0	0	17	000
	547-7	101119	1		18	00	00	14	2	0 0	18	0 0	00	ζ	0	0	0	18	000
	1 1 1 1 1 1	19	(17)(16	~ ⊂	00	15	स्ल	0 17	17	00	00	2,	2	0	0	17	000
EXTREMIS	! ! !	1000	(0)		0	00	0	0	0	00	0	0 0	00	c	0	0	0	0	000
	1	100 1	1) (€	00	00	1	0	00	7	0 0	00	•	10	0	0	7	000
H	5-1	10	0 0 0		0	00	0	0	0	00	0	0 0	00	c	0	0	0	0	000
OR KILLED	! !	10	(1) (₽	0 0	0	1	0	00	₽	0 0	00	-	0	0	0	1	000
D DEAD	 	1000	(0		0	00	0	0	0	00	0	0 0	00	c	0	0	0		000
FOUND	! !	100 10) (0		0	00	0	0	0	00	0	0 0	00	c	0	0	0	0	
ANIMALS	1-364) (0		0	0 0	0	0	0	00	0	00	00	c	0	0	0	0	000
A	! ! ! !	1 0	(1)(1	0 0	0	₽	0	00	1	0 0	00	-	- 0	0	0	7	000
	-	PM) : OPSIED :	MINED) :	1)	1	+ +	+ + + +	1	+	+ + + + +	1	+ -	+ + + +	ı	+	+++	++++	1	+ + + + + + +
, ,	100(EL (P NECR									S							CELLS	
	1	LEV NO.	0 N)								HEMATOPOIESI								
		ORGAN FINDINGS	DRENAL GLANDS		ANGIECTASIA			CONGESTION			EXTRAMEDULLARY			# 5 8 H 8 B O B # H	100000000000000000000000000000000000000			HYPERPLASIA OF	
	PERIOD(DAYS)	LEVEL (PPM) DINGS NO. NECROPS	(NO. EXAMIN		ANGIECTASIA			CONGESTION		*	EXTRAMEDULLARY HEMATOPOIESIS		+	ш у ч н а а а С С и и н т			+	HYPERPLASIA OF GLOMERULOSA CELLS	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

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NO. 83004	! ! !														
STUDY NO															
ST	! ! !	1000	(16)		7.	- 0	0	16	00	0	16	0	00	* 0 ~	mm
	743	100	17)(18)(17)(15	N 0 6	5	17	0	0	17	0 (00	11	0 0
	547-743	10	(18)		16	N O (5	8 0	0	0	18	0 0	00	14	। त त
	! ! ! !	19	(17)		16	- 0 0	5	17	00	0	16	← (00	13	140
:1	1	100	0)												
	! ! !	1000	1)(000		00			0	00	00	00	00
1	365-546	100	0) (1			000		00			H	00	00		00
	365	10	1)(0			000		00	0	0	0	00	00	00	00
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 		I I 0 0	(0)		00	000	,	00	0.6	-	0	00			
! ! !		100) (0			000								00	
! ! !	1-364	10 100 0 0)(0					00				0 0		00	
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! ! !	PERIOD(DAYS	LEVEL (PPM) NO. NECROPSIED	UED) (NO. EXAMINED)											. A L	
1 1	ERIOD	LEVEL NO. NE	ED) NO. E		MEDULLARY CELLS						(0			DEGENERATION OF CORTICAL	
1 1	۵.	1 S L			LARY						CELL			1 OF (
1 1 1		! ! !	00)		MEDUL						ICAL			ATION	
1 1 1		1 1 1 1	SQ					N C			OF CORTICAL CELLS			GENER	
! ! !		GAN FINDINGS	GLANDS		LASI			LTATI(NG 01			AR DE	
1		ORGAN FINI	ADRENAL		HYPERPLASIA OF			PIGMENTATION			SWELLING			VACUOLAR CELLS	
1		1 1	AD					-			U)			>	

: - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. 1) GRADE: * P<0.05

TABLE 14 - F - 2 - 47

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

	PERIOD(DAYS) :	1-364	7	! !	547-743
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		10 100 1000	1	0 10 100 1000 19 19 19 17
BONE (FEMUR)		(1)(0)(0)(0)	(0)(0	(1)(0)(1)(0)	(18)(19)(18)(17)
OSTEOSCLEROSIS	. 1 + + + + + + + + + + + + + + + + + +			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	15 16 17 14 1 0 · 0 2 2 2 1 1 0 1 0 0

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - F - 2 - 48

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS FEMALE

		 	1										STUDY NO. 83004
	PERIOD(DAYS) :	1 1 1 1 1	1-364	4	i ! ! !	1 1 1 1 1 1	365-546	9.	 		547-743	.43	1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 1 1	10	100 1000	00	1 0 1	100	100 1000	 00	19	10	1	1000
MUSGLE (O. FEMORIS)	(NO. EXAMINED) :	(1)(0 (0) (0	(0	(1) () (0	1)((0	(18)(18) (18)(18)(17)
ATROPHY	1 + + + + + + + +	0 0 0	0000	0000	0000	0 0 0	0000	4000	0000	17 0 1	18 0 0	18000	17 0 0 0
HISTIOCYTOSIS	+ + + + + +		0000	0000	0000	1000	0000	1000	0000	17 0 0	18 0 0	18 0 0	
INFILTRATION OF LEUCOCYTES	CYTES + + + + + + + + + + + + + + + + + + +	0 0 0	0000	0000	0000	0 0 0	0000	1000		18 0 0	18 0 0	18 0 0	1, 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

1) GRADE : - / NEGATIVE; + / SLIGHT; ++ / MODERATE; +++ / SEVERE.

TABLE 14 - F - 2 - 49

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

		1	1 1 1	! ! !	1 1								STUDY NO. 83004
	PERIOD(DAYS) :	; ; ; ;	1-364	1 1 1	!		365-546			! ! ! !	547-743	43	1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 + 1	10	100 1	1000	101	100	100 10	1000	19	10	100 1	0 1000 9 17
אנא	(NO. EXAMINED) :	(1)() (0) (0	(0	(1)()(0)	1) ((0)	(18)(1	18) (18) (17)
	1)												
EPIDERMOID CYST	1	← (0	0	0	↤	0	⊣	0	17	18	18	17
	+ + +	00	00	00	00	0 0	00	00	00	10	00	00	00
	+ + +	0	0	0	0	0	0	0	0	0	0	0	
HEMORRHAGE	1 +	1	00	00	,00	₩ 0	00	₩ 0	00	17	18	18	17
	+ + + + + +	00	00	00	000	000	000	000	000	0 11 0	000	000	000
HISTIOCYTOSIS	' + +	100	000	000	000	100	000	400	000	17	800	18	17
	+ + +	0	0	0	0	0	0	0) (0	0	00
INFILTRATION OF LEUCOCYTES	CYTES - + + + + + + + + + + + + + + + + + +	. 0 0 0	0000	0000	0000	4000	0000		0000	16 0 0	8000	18	17 0 0 0
										•)))

1) GRADE: - NEGATIVE; + SLIGHT; ++ NODERATE; +++ SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN <u>EXTREMIS</u>

STUDY NO. 83004

	PERIOD(DAYS):	i I		1-364				365-	365-546			547-743	243		 	,
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		1011	10 10	100 1000	000	0 4	10		100 1000	100	100	100 1000	17	; 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
MAMMARY GLAND	(NO. EXAMINED) :	~	1)(0	0 (0	6	(1)() (0) (1)(60)	(19)	19)(18)(18)((18) ((17)		
DILATATION OF GLAND	+ + + + + +		1000	0000	0000	0000	1000	0000	000	0000	0 0 0	16 0 0	0 1 0	17. 0 0		
HYPERPLASIA	! + + + + + +		0 0 0	0000	0000	0000	1000	0000	4000	0000	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	4 K K H H	13 0 0	4 H H H		
INFILTRATION OF LEUCOCYTES	71ES + + + + + + + + + + + + + + + + + + +		1000	0000	0000	0000	0 0 0	0000	.4000	0000	10 00 00	118	16 0 0	16 0 0		

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

TABLE 14 - F - 2 - 51

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

	PERIOD(DAYS):		1-364				365-546	246			547-743	743		; ; ; ; ; ;
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	. 0	10	100 1000	0,0	0 -	100	100 1000	000	19	10	100 1	1000	
EYE BALLS	(NO. EXAMINED) :	3 (0)) (0) (0	ô	(1)()(0)	(1)(6	(17)	(17) (19) (17) (17)	(17)	17)	
CALCIFICATION, SCLERA	1 + + + + + + + +	0000	0000	0000	0000	000	0000	4000	0000	15 2 0 0	19 0 0	, 0000	1 2 0 0	
CATARACT	1 + + + + + + + +	0000	0000	0000	0000	4000	0000	4000	0000	16 0 0	16 00 00	10 0 1	16 0 0 0	
RETINAL ATROPHY	' + + + + + +	0000	0000	0000	0000	1000	0000	4000	0000	16	1000	91007	2000	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FEMALE FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

STUDY NO. 83004 100 1000 19 17 (18)(19)(17)(17) 17000 15000 547-743 10 000 19 13 ANIMALS FOUND DEAD OR KILLED IN EXTREMIS 100 1000 2 0 6 0000 0000 (1)(0)(1)(000 000 0 0 0 365-546 0000 0000 0000 7 -000 000 000 100 1000 6 0000 0000 0)(0)(0 0000 0000 1-364 0000 0000 0000 1)(000 (NO. EXAMINED) : (1) PERIOD(DAYS) : + + + + + + + + + + +++ ++ LEVEL (PPM) NO. NECROPSIED INFILTRATION OF LEUCOCYTES

HARDERIAN GLANDS

ATROPHY

FIRDINGS

ORGAN

HYPERSECRETION

- , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. 1) GRADE: * P<0.05

14 - F - 2 - 53TABLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FEMALE FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

DOGAN PERIODO CDAYS) : 1-364 DOGAN PERIODO CDAYS) : 10 100 1000 DOGAN MO. WECHAPITON OF CEREBRAL VENTRICLE HEYOPRHAGE HEYOPRHAGE HEYOPRHAGE PERIODO CDAYS) : 1-364 MO. WECHAPITON OF CEREBRAL VENTRICLE HEYOPRHAGE HEYOPRHA			! ! !	: ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;		: ; ; .	7 1 1 2 1 2 2 2 2 2 2	; i	7		21				STUDY NO.
ORGAN LEVEL (PPM) 1		PERIOD(DAYS			1-364				365-5	979			247-7	,43	; ; ; ; ; ; ; ; ;
OPHY THE TOTAL CEREBRAL VENTRICLE	0 8	LEVEL (PPM) NO. NECROPSI				00 10	000	0 4	10		000	1001	10		0000
THE MOSIDERIN-LADEN THE MOSID	W S A I N	(NO. EXAMINED		(1)(0) (0	0)(0	60	(1)		1)		(19)		17)	
OF CEREBRAL VENTRICLE			1)												
CF HEMOSIDERIN-LADEN	ATROPHY		ı	H	0	0	0	~	0	7	0	18	14	17	
CF HEMOSIDERIN-LADEN			+	0	0	0	0	0	0	0	0	0	2	0	. 0
CF HEMOSIDERIN-LADEN - 1 0 0 0 0 1 0 1 0 1 15 16 16 16 16 16 16 16 16 16 16 16 16 16			+ + + + +	00	00	00	00	00	00	00	00	0	~ ~	00	00
CF HEMOSIDERIN-LADEN - 1 0 0 0 0 1 0 1 0 1 1 1 1 1 1 1 1 1 1	Ċ			,			,								
CF HEMOSIDERIN-LADEN - 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	O.		1	(0 (0 (0	← .	0	٦.	0	16	15	16	14
CF HEMOSIDERIN-LADEN - 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			+ +	0 0	0 0	0 0	00	0 0	0 0	0 0	0 0	с (۰ ۲	۰ ,	↔ (
CF HEMOSIDERIN-LADEN - 1 0 0 0 0 1 0 1 0 17 18 18 17 18 18 18 18 18 18 18 18 18 18 18 18 18			+ + + +		00	00	00	00	00	00	00	V 0	0 1	-10	V 0
CF HEMOSIDERIN-LADEN - 1 0 0 0 0 1 0 17 18 18 18 18 18 18 18 18 18 18 18 18 18															
+ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	CF	SIDERIN-LADEN	ı	← •	0	0	0	Н	0	~	0	17	18	17	16
+++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8775		+ :	o ()	0 (0 (0 (0 (0 (0 (2	0 (0 (
- 1 0 0 0 1 0 1 0 1 1 0 1 1 1 1 1 1 1 1			+ + + +	> C	> C	o c	o c	> C	0 0	o c	o c	0 0	0 0	0 0	00
- 1 0 0 0 1 0 1 15 16 15 +++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			- -)	>)	o		>	>	o	•	>	>	o.
+ + 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	HEMORRHAGE		1	1	0	0	0	₽	0	₩	0	15	16	15	13
**** - 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			+ +	00	00	00	00	00	00	0 0	0 0	2 0	0 0	~ <	
*** - 1 0 0 0 1 0 5 17 6 + 0 0 0 0 0 0 0 14 1 11 ++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			+ + + +	00	0	00	00	00	00	00	00	0 0	٥ د	00	0
- 1 0 0 0 1 0 1 0 5 17 6 + 0 0 0 0 0 0 14 1 11 ++ 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							•						* * *		
	PIGMENTATION		t ·	₩.	0 (0 (0	₩.	0	~ (0 (ν,	17	9,	41
			+ + +	00	00	00	00	00	00	0 0	00	1	H 0	11	13
			+++	0	0	0	0	0	0	0	0	0	0	0	0

1) GRADE: - NEGATIVE; + SLIGHT; ++ NODERATE; +++ SEVERE.

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> CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS

FEMALE

	PERIOD(DAYS.) :		1-364	7			365-	365-546			-275	243		
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	l 	10	10 100 1000	000	101		100	10 100 1000 0 2 0	19	10 100 19 19	100 1000 19 17	1000	
0	(NO. EXAMINED) : (1) (0)(0)(0)((0)	(1)	(0)	. (1)	(1)(0)(1)(0)	(18)	18)(18)(18)(17)	(18)	(17)	I I I
	1)													
HEMORRHAGE	ı	7	0	0	0	4			0	85	17	ζ.	. 17	
	+	0	0	0	0	0		-	0	0		0	. 0	
	++	0	0	0	0	0			0	0	0	0	0	
	+ + + +	0	0	0	0	0	0		0	0	0	0	0	
											* *			
PIGMENTATION	1	7	0	0	0	~	0	₩.	0	9	18	10	9	
	+	0	0	0	0	0			0	12	0	ω	11	
	++	0	0	0	0	0			0	0	0	0	0	
	+++	0	0	0	0	0			0	0	0	0	0	

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE. *** P<0.001

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TABLE

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEGPLASTIC FINDINGS FEMALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

				STUDY ND. 83004
	PERIOD(DAYS) :	1-364		547-743
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	10 100 1000	0 10 100 1000	0 10 100 1000 19 19 19 17
SCIATIC NERVE	(NO. EXAMINED) : ((1)(0)(0)(0)	(1)(0)(1)(0)	(18)(18)(18)(17)
	1)			
DEMYEL IN IZATION	1 + + +	0000	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17 18 18 17 0 0 0 0 1 0 0 0 0 0 0

1) GRADE : - , NEGATIVE; + , SLIGHT; ++ , MODERATE; +++ , SEVERE.

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3	2	

TABLE 14 - F - 2 - 56

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NON-NEOPLASTIC FINDINGS FEMALE

ANIMALS FOUND DEAD OR KILLED IN <u>EXTREMIS</u>

	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1 1 1 1 1	1	1							STUDY NO. 83004
	PERIOD(DAYS) :		1-364		1 	365-546	-546	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!			
ORGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED		10 1(0 10 100 1000	1 0 1	10 100	0 10 100 1000 1 0 2 0	;	0 10 100 1000 19 19 19 17	100 1	0000
OPTIC NERVE	(NO. EXAMINED):	V	0 (0	1)(0)(0)(0)	(1)(0)(1)	(1)(0)(1)(0)	1	(18) (19) (17) (17))(12)(17)
CETACOCHE - BO MOTTAGT HEMI		1)									
	1 + + + + + + + 2 - -	1 + + +	0000	0000		0000	0000		18 19 16 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	, 19 0 0 0	177
									•)	· ·

1) GRADE : - / NEGATIVE; + / SLIGHT; ++ / MODERATE; +++ / SEVERE.

15 - 1 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

	SEX	1	 	MALE	1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 	 	FEMALE	L E		3.001 NO. 03.004
FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	1 1 1	52	10	100 1000 52 52	1000	1 1 1	0 52	10	100	1000	
MULTIPLE OPGANS	(NO. EXAMINED):	· ·	52) (18)(10)(52)	· · · · · · · · · · · · · · · · · · ·	52) (19) (21) (52)	
MALIGNANT LYMPHOMA (HISTIOCYTIC SARCOMA)			0	0	0	4		0	0	0	0	
MONONUCLEAR CELL LEUKEMIA			10	ſΛ	4	10		13	* ~	٥	12	
MYELOCYTIC LEUKEMIA			0	0	0	0		0	0	₽	2	
** P<0.01		1		i i i !	\$ 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		

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TABLE 15 - 2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

B B B B B B B B B B B B B B B B B B B	SEX] 	MALE	 		1		FEMALE		STUDY NO. 83004 MALE FEMALE
FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	0 10 100 1000 52 52 52 52	100	1000	! ! !	0 52	10	0 10 100 1000 52 52 52 52	1000 52
PLEURA	(NO. EXAMINED) : ()(0) (0) (0	! ! !)(0)) (0)(0	(0)(0)(0)(0)	0 (0
MALIGNANT FIBROUS HISTIOCYTOMA	/TOMA	0	0	0	₩		0	0	0	0

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TABLE 15 - 3

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

			, ;	L L L L L L L L L L L L L L L L L L L	1 CV 1 CO					STUDY NO. 83004
ORGAN			MALE			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		FEMALE	 	
FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0	10 52	100	1000	1 1 1	52	10	100	1000 52
ERITOMEUM		2) (1)(3) (3)		1)()(0	1) (2)
FIBROSARCOMA		0	0	↔	0		0	0	0	0
LIPOSARCOMA		0	0	1	0		0	0	0	0
MALIGNANT FIBROUS HISTIOCYTOMA	ОМА	0	0	0	0		0	0	₩	0
MESENCHYMOMA		0	0	0	0		0	0	0	1
MESOTHELIOMA		2	₽	1	2		₽	0	0	0
SARCOMA		0	0	0	0		0	0	0	۲.

, TABLE 15 - 4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED <u>in extremis</u> or on schedule (TREATMENT PERIOD)

	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								STUDY NO. 83004
ORGAN	SEX :		MALE	 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	: ! ! !	!	FEMALE		MALE
FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	!	10	10 100 1000 52 52 52	1000		0	10	0 10 100 1000 52 52 52 52	1000 52
THYRUS	(NO. EXAMINED) : (49)(15)(10)(50)	10)(!	7)) (67	19) ((49)(19)(16)(52)	52)
THYMOMA		0	0	0	0		0	0	0	1

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TABLE 15 - 5

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, 15. 145 CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED <u>IN EXTREMIS</u> OR ON SCHEDULE (TREATHENT PERIOD)

		!	1 1 1 1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1	; ; ;				STUDY NO. 83004
ORGAN	SEX :						 	FEMALE		
FINDINGS	LEVEL (PPM) : NO. NECROPSIED :))	i	10 100 1000 52 52 52	1000	! ! !	0 52	10 100	:	1000
	(NO. EXAMINED) : ((52)(52)(18)(9) (52)	52)		52) ((52)(19)(20)(20) (52)
HEMAKGIOSARCOMA		0	←	0	0		0	0	0	0
MALIGNANT LYMPHOMA	÷	0	. °	0	0		0	0		

. TABLE 15 - 6

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED <u>IN EXTREMIS</u> OR ON SCHEDULE (TREATHENT PERIOD)

ORGAN	SEX S		!	 MALE		 	: : : :	FEMALE	 	: : : : : : : : : : : : : : : : : : :
ND INGS	LEVEL (PPM) : NO. NECROPSIED :	52		10 100 1000 52 52 52	1000	52	0 52	10 100 52 52	1	1000 52
Гимб	(NO. EXAMINED) :	J	52)(50)(52) (52)	1	52)((52)(19)(20)(52)	20) (52)
PAPILLARY ADENOCARCINOMA		0	0	0	1		0	0	0	· 0
PAPILLARY ADENOMA			Ŋ	2	9		2	0	0	2

TABLE 15 - 7

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							STUDY NO. 83004
ORGAN	SEX :		MALE		; ; ; ; ; ;	MALE	L - - - -	FEMALE	1	
FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		10	100	1000 52	0 52	0 10 100 52 52 52	100	0 10 100 1000 52 52 52 52	
ORAL CAVITY	(NO. EXAMINED) : ((0)(1)(0)) (0	1) (1)(0)	 	(0) (0) (1) ((0)(0)(1)(0)	
SQUAMOUS CELL CARCINOMA		0	0	Ħ	0	0		0	0	

TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

		1	1	i						STUDY NO. 83004
OPGAN	SEX :	 	MALE	; ; ; ; ;	; ; ; ; ; ;	 		FEMALE	Ш.	
NDINGS	LEVEL (PPM) : NO. NECROPSIED :		10 100 1000 52 52 52	100 1000 52 52	1000		0 52	10 100 52 52	,	1000 52
TORGUE	. (NO. EXAMINED) : (1)()(0)(0	(0		3) () (0)(0 ·)(0	0)
FIBROMA		↔	0	0	0		0	0	0	0
KERATOACANTHOMA		0	0	0	0		Ħ	0	0	0 '
S@UAMOUS CELL CARCINOMA		0	0	0	0	.,	2	0	0	0

TABLE 15 - 9

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED <u>IN EXTREMIS</u> OR ON SCHEDULE (TREATMENT PERIOD)

SEX	SEX :		MALE	1 1 1 1 1		 	; ; ; ; ; ;	FEMALE	ш Ш	: MALE
o	LEVEL (PPM) : NO. NECROPSIED :	0 10 100 1000 52 52 52 52	,10 100 1000 52 52 52	100	1000	1	0 10 100 1000 52 52 52 52 52	10	10 100 1000 52 52 52	1000
STOMACH (NO. EXAMINED)	(NO. EXAMINED) : ((52)(15)(10)(51)	15)(10)(51)	 	(51)(18)(18)(50)	18)(18) (: (52)(15)(10)(51) (51)(18)(18)(50)
KERATOACANTHOMA		0	0	0	0		н	0	0	0

15 - 10 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

7 V V V V V V V V V V V V V V V V V V V	SEX :			MALE			FEMALE	LE	
ND I MG S	LEVEL (PPM) : NO. NECROPSIED :	52	10	10 100 1000 52 52	1000	52	10 100 52	1 1	1000
JEJUNUM	(NO. EXAMINED) : (52)(52)(15)(7)(51)	51))(87	(48)(18)(17)(48)	17)(48)
ADENOCARCINOMA		0	П	0	0	0	0	0	0
LEIOMYOSARCOMA		0		0	0	0	0	0	0

TABLE 15 - 11

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

	SEX ::	 	MALE	MALE	! ! ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 	FEMALE		1 1 1	
NDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	1 1	10 100 1000 52 52 52	1000	1	0 52	10 100 52 52	1	1000	
LIVER	(NO. EXAMINED) :	(52	(52)(17)(10)(52)	(10)(52)	_	51)((51)(19)(19)(52)	19)(52)	; ; ; ; ; ; ; ;
HEPATOCELLULAR ADENOMA		+	H	0	0		0	0	0	0	
HEPATOCELLULAR CARCINOMA		.t .	0	0	0		0	0	0	0	

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TABLE 15 - 12

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

.

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

ORGAN	SEX :		MALE		MALE			FEMALE	LE	1
NDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10		1000	! ! !	52		10 100 1000 52 52 52	1000
PANCREAS			15)(52)(15)(8)(52)	52)	· · ·) (67	18)(17)(51)
EXOCRI4E ADENOMA		0	0	0	7		0	0	0	0
ISLET-CELL ADENOMA		2	1	0	М	•	1	0	17	M

TABLE 15 - 13

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

0 0 0 0 0	SEX :		MALE				 	FEMALE	 ALE	
FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	25	10	100	1000	1	52	10	100	1000
KIDNEYS	(NO. EXAMINED) : (52)() (67	52)(51)		51) (52)(52) (52)
ADENOCARCINOMA		0	0	o ,	0		. 0	щ	0	0
ADENOMA		0	Ц	0	0		0	0	0	0
MESENCHYMOMA		0	0	4	0		0	0	Н	0
TRANSITIONAL CELL CARCINOMA		₽	0	0	0		0	0	0	0

TABLE 15 - 14

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

		1 1 1 1 1 1	: : : :	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	! ! ! ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	! ! ! !	1	STUD	STUDY NO. 83004
ORGAN	SEX :	MALE	MALE				FEMALE	ALE		† ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;
	LEVEL (PPM) : NO. NECROPSIED :	52	0 10 100 1000 52 52 52 52	100	1000 52	0 10 100 1000 52 52 52 52 52	10 100 1000 52 52 52	100	1000	
TESTES	CNO. EXAMINED) : C	i	52)(16)(10)(52)	10) (52)	52)					
LEYDIG CELL TUMOR		77	13	9	43			,		
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1								

TABLE 15 - 15

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

27 00 00 00	×∃∞			ш				FEMALE) L E		FEMALE
SONIGNI		 	! !	10 100 1000 52 52 52	1000	1	1	0 10 100 1000 52 52 52 52	100	1000	
0	! !	[1 1 1 1 1 1 1	1 1 1 1 1 1 1	1 1 1	 		51)(18)(18)(52)	18) (52	52)	
GRANULOSA-THECA CELL TUMOR	TUMOR						ч	0	0	€	

TABLE 15 - 16

4.

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

		! ! ! ! !			, , ,					STUDY NO	0.83004
ORGAN	SEX :	 	I			i ! ! !	; ; ; ; ;	I E	1	t	
FINDINGS	LEVE NO.	52	10	100	0 0	i i i i	52	10	100	1000	
UTERUS	EXAMI	1 1 1 1 1 1	! ! ! ! !				51)(18) (19)(52)	
ADEMOCARCINOMA							1	0	0	0	
АБЕМОМА							↔	0	0	0	
ENDOMETRIAL STROMAL SARCOMA	-						0	0	₽	5	
FIBROMA		•					0	0	0	L1	
GRANULAR MYDBLASTOMA							. 0	₽	0	0	
HEMANGIOMA							0		↔	0	
LEIOMYOMA							0	0	0	7	
LEIOMYOSARCOMA							0	0	€ 1	0	
POLYP							2	1	N		

15 - 17 TABLE

-!-

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

מפטמט	SEX :		MALE				FEMALE	FEMALE	1.E	
SDNIGN	LEVEL (PPM) : NO. NECROPSIED :	52	10 100 1000 52 52 52	100	1000	! !	0 10 100 52 52 52	10	1	1000
AGINA	(NO. EXAMINED) :	1 1 1 1 1 1 1 1	 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			(50)(19)(18)(52)	19) (18) (52)
MESENCHYMOMA							0	0	0	Н
POLYP							0	0	0	4

TABLE · 15 - 18

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

SCHEDULE	
NO	
OR	_
TREMIS	T DED TO
N	u X
KILLED IN EX	TPEAT
DEAD,	
FOUND	
ANIMALS	

			-	- NEA - MEN -	C TREATMENT PENTOD 2					STUD	STUDY NO. 83004
ORGAN	SEX				1 1 1 1 1 1 1 1 1	! !	1 1 1 1 1	FEMALE	!		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
NDINGS	LEVEL (PPM) : NO. NECROPSIED :	5	10		100 1000 52 52	1 1 1	52	10	10 100 1000 52 52 52	1000	
CLITORAL GLAND		1 1 1 1 1 1	: : : : :	1 1 1 1 1	: ! ! ! !		(2)(1)(1)(1)(1)	1) (5)	
ADEMOCARCINOMA							2	€	7	4	
SQUAMOUS CELL CARCINOMA							0	0	O	1	

TABLE 15 - 19

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS
ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE
(TREATMENT PERIOD)

ORGAN	SEX :		MALE					FEMALE	LE		! ! ! ! ! ! !
NDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10 100	10 100 1000 52 52 52	1000	! ! !	52	10	10 100 1000 . 52 52 52	1000 .	
PITUITARY GLAND	: (0		17)(50)(17)(10)((67	: : : :	51)(18) (51)(18)(18)(51)	51)	
ADENOCARCINOMA		0	0	0	0		0	0	₽.	0	
ADENOMA		12	* •	1	17		17	6	9	18	
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1	1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1	1	1

15 - 20 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

	ANIMALS F	ONNO	DEAD	KILLED C TREA	INEX	ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERTOR)	ON SC	HEDULE				
		1				3 3 1 1					STUDY NO. 83004	83007
ଅ ୯ ୯ ଓ ଜ	SEX :			MALE		 	1 1	i i	FEMALE	! ! !		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		0 52	10	100	1000	! ! !	52	10	100	1000	
HYROID GLANDS	. EXAMINED) :		52)(15)(10)(52)	· · ·	51)(18)(18) (50)	
C-CELL CARCINOMA			0	0	0	0		0	0	↔ `	. 0	
C-CELL ADENOMA			4	м	₽	ľ		٥	0	2	v	
FOLLICULAR ADENOMA			0	0	0	0		(4	0	0	0	
PAPILLARY ADENOMA			0	0	0	0		0	₽	0	0	

THYROID

ORGAN

ABLE 15 - 21

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

	SEX		MALE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	! ! ! ! !	 		 FEMALE	LE	
FIND INGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100 1000 52 52	1000	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	52	10	100	1000
ADREHAL GLANDS	MINED)	52)(16)(10)(10) (51)	\ \ !	20) (51)() (67	51)
CORTICAL TUMOR		1	0	0	0		0	0	0	0
GANGLIONEURONA		0	Н	0	0		0	0	0 .	. 0
NEUROBLASTOMA		₽	0	0	0		0	0	0	0
PHEOCHROMOCYTOMA		~	N	2	4		۸	м	2	۷

TABLE

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

ORGAN SEX:	SEX:		MALE		MALE			FEMALE		! ! ! ! !	
FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	0 10 100 1000 52 52 52 52 52	100	1000	1	0 52	0 10 100 52 52 52	0 10 100 1000 52 52 52 52	1000	
VERTEBPA		(0)(0)(0)(0)	(0)(0)(0)(0) (0	1 1		> (0) (0	(0)(0)(1)	1)	
СНОВООМА		0	0	. 0	0		0	0	0 `	н	

TABLE 15 - 23

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

7 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	SEX		MALE					FEMALE	LE	
NDINGS	LEVEL (PPM) : NO. NECROPSIED :	! !	0 10 100 1000 52 52 52 52	100	1000	! ! !	0 52	10 100 52 52	t I	1000
FEMORIS)			52)(16)(10)(52)	10)(52)		51)(18) ((51)(18)(19)(52)
RHABDOMYOSARCOMA		0	0	0	0		0	0	0	£-

TABLE 15 - 24

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

			-	I VEW I LIEW I	0001					STUDY	STUDY NO. 83004
ORGAN	SEX :		MALE			!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		FEMALE		 	; ; ; ; ; ; ; ; ;
FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000	! ! !	52	10	100	1000	
SKIH	(NO. EXAMINED) : (52)(16)(10)(52)	J	51)(18)(19)(52)	1 1 1 1 1 1 1 1 1 1 1 1
BASAL CELL TUMOR		0	0	0	0		Н	0	0	. 0	
KERATOACANTHOMA		ਜ	-	0	0		0	0	0	0	
PAPILLOMA		₽	0	0 .	0		0	0	0	0	
SEBACEOUS SQUAMOUS CELL CARCINOMA	RCINOMA	0	0	0	٦		0	0	0	0	
SQUAMOUS CELL PAPILLOMA		0	0	* ←	0		7	0	0		
SQUAMOUS CELL CARCINOMA		1	0	⊣	0		0	0	← 1	0	

TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED <u>in extremis</u> or on schedule (Treatment Period)

	· >u0						1111111		
ORGAN		1 1 1	MALE	ш ,			FEMAL	ALE	
FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000	52	10	100	1000
SKIN (SUBCUTIS)	(NO. EXAMINED) :	(55) ((16)(10)(52)	(51) (18) (-	52)
FIBROMA		Ħ	↔	0	М	0	0	ò	, t
FIBROSARCOMA		•	₽	1	~	0	0	0	0
LIPOMA		Н	0	0	₩	0	0	0	1
LIPOSARCOMA		0	0	0 .	₩	0	0	0	0
MALIGNANT FIBROUS HISTIOCYTOMA	ТОМА	0	* ~ ~	0	0	0	0	0	
МЕЅЕИСНҮМОМА		1	₽	0	0	0	0	0	1
RHABDOMYOSARCOMA		0	1	0	0	0	0	0	0
SOUAMOUS CELL CARCINOMA		0	₽	0	0	0	0	0	0

TABLE 15 - 26

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

TOTAL INCIDENCE OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD, KILLED IN EXTREMIS OR ON SCHEDULE (TREATMENT PERIOD)

ORGAN	SEX :		MALE		1 1 1 1 1	! ! ! !	! ! ! !	FEMALE	LE		
FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	52	10	100	1000	! ! !	52	10	100	1000	
MAMMARY GLAND	(NO. EXAMINED) : (52) (16) (10)(51)	: : : :	52) (18)(19) (52)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
АБЕНОМА		1	0	0	0		Н	0	0	2	
FIBROADENOCARCINOMA		0	0	0	€4		0	0	0	0	
FIBROADENOMA		0	0	* ←	0		۲v	m	. M	9	
намавтома		0	0	0	1		0	0	. 0	. 0	
PAPILLARY ADENOMA		0	۲1	0	0		0	0	ч	0	

* P<0.05

	STUDY
	TOXICOLOGICAL RAT
16 - M - 1	INHALATION IN FISCHER
TABLE	CARCINOGENIC OF METHANOL
	AND
	CHRONIC

OF METHANOL IN FISCHER RAT FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

MALE

		ANIMALS KILLED ON SCHEDULE	STUDY NO. 83004
	PERIOD(MONTHS):	2.4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 10 100 1000 36 34 42 34	
MULTIPLE ORGANS	(NO. EXAMINED) :	(36)(0)(34)	
MONONUCLEAR CELL LEUKEMIA	JK EM I A	5 0 0 3	

	IABLE IO I N I I C	
	CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT	
	FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS	
	ANIMALS KILLED ON SCHEDULE	STUDY NO. 83004
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 4 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	
)RGAN FINDINGS	LEVEL (PPM) : 0 10 1000 NO. NECROPSIED : 36 34 42 34	
11ONEUM	(NO. EXAMINED) : (1)(0)(0)(2)	
4ESOTHELIOMA	1 0 0 1	

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TABLE

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

MALE

ANIMALS KILLED ON SCHEDULE

LEVEL (PPM) : 0 10 1000 NO. NECROPSIED : 36 34 42 34 (NO. EXAMINED) : (36)(34)(42)(34) ILLARY ADENOMA O 0 0 1 * * * * ** ILLARY ADENOMA O 5 2 6					
R C I NOMA			9	10 1	00 1000 42 34
CINOMA . 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	ON)). EXAMINED) :	(36)(34)(45)(34)
* ** PAPILLARY ADENOMA 0 5 2 6	PAPILLARY ADENOCARCINOMA	·	0	0	. 1
	ILLARY ADENOMA		0	* 10	* 9

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TABLE	

STUDY NO. 83004 FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS ANIMALS KILLED ON SCHEDULE 100 1000 42 34 (NO. EXAMINED): (36)(0)(34) 0 0 0 10 34 0 0 36 LEVEL (PPM) : NO. NECROPSIED : PERIOD(MONTHS) : HEPATOCELLULAR CARCINOMA HEPATOCELLULAR ADENOMA FINDINGS LIVER

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS ANIMALS KILLED ON SCHEDULE
ANTMAIS KTILED ON SCHEDULE
PERIOD(MONTHS) : 24 ·
LEVEL (PPM) : 0 10 100 1000 NO. NECROPSIED : 36 34 42 34
(NO. EXAMINED) : (36)(0)(0)(34)
0 0 0
2 0 0 3

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FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

PERIOD(MONTHS) :	PERIOD(MONTHS) :		5.4	
ORGAN	LEVEL (PPM) : NO. NECROPSIED :	36	10 10	0 10 100 1000 36 34 42 34
TESTES	(NO. EXAMINED) :	(38)) (0	(38)(0)(0)(34)
				•
LEYDIG CELL TUMOR		34	0	0 32

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FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

MALE

ANIMALS KILLED ON SCHEDULE

	0 10 100 1000 36 34 42 34		
77	0 10 100 1000 36 34 42 34	(35)(0)(0)(35)	6 0 0 9
PERIOD(MONIHS) :	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINED) :	
	OPGAN FINDINGS	PITUITARY GLAND	ADEROMA

	TABLE 16 - M - 1 - 8.	
	CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT	
	FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS	ר בּ
	ш	STUDY NO. 83004
	PERIOD(MONTHS): 24	
OPGAN FINDINGS	LEVEL (PPM) : 0 10 100 1000 NO. NECROPSIED : 36 34 42 34	
THYROID GLANDS		
C-CELL ADENOMA	3 0 0 4	

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FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

MALE

ANIMALS KILLED ON SCHEDULE

	0 10 100 1000 36 34 42 34		
24	0 10 100 1000 36 34 42 34	(35)(0)(0)(33)	7 0 0 5
PERIOD(MONTHS) :	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINÈD) :	
	ORGAN FIRDINGS	ADREMAL GLANDS	PHECCHROMOCYTOMA

	5
- 10	TOXICOLOGICAL
16 - M - 1	THA! ATTON
TABLE	CARCINOGENIC
	ONA
	OLIV

STUDY NO. 83004 FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS CARCINOGENIC INHALATION TOXICO
OF METHANOL IN FISCHER RAT ANIMALS KILLED ON SCHEDULE (NO. EXAMINED): (36)(0)(34) 0 0 0 10 100 1000 34 42 34 0 0 0 PERIOD(MONTHS): SQUAMOUS CELL CARCINOMA KERATOACANTHOMA ORGAN FINDINGS PAPILLOMA SKIN

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

			O	OF METHANOL IN FISCHER RAT		
		FREQUE	NCY AN	FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS	MALE	
			A	ANIMALS KILLED ON SCHEDULE		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	PERIOD(MONTHS):		24			NO. 60004
ORGAN FIMDINGS	LEVEL (PPM) : NO. NECROPSIED :	3.6	10 10 34 4	100 1000 42 34		
SKIR (SUBCUTIS)	(NO. EXAMINED) :) (98))(0	36)(0)(0)(34)		
FIBROMA			0	0 3		
FIEROSARCOMA		4	0	0 1		
LIPGMA		~	0	0 1		
LIPOSARCOMA		0	0			

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TABLE

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

				ANIMAL	ANIMALS KILLED ON SCHEDULE STUDY NO. 83004	83004
	PERIOD(MONTHS):	1 1 1 1 1 1 1 1	24	1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	36	10 1 34	10 100 1000 34 42 34	000	
MAMMARY GLAND	(NO. EXAMINED) :	(36)(0 0	36)(0)(0)(34)	34.)	
АДЕКОМА		← 1	0	0	0	
FIBROADENOCARCINOMA		0	0	0	·	
HAMARTOMA		0	0	0	· ·	

TABLE 16 - M - 2 - 1

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

MALE

	PERIOD(DAYS) :	 	1-364	7	1 1 1	1 1	365-546	365-546	1 1 1 1 1 1		547-736	547-736		l I
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	502	10	2 0 0 1		0 4	0 10 100	0 10 100 1000 1 5 5 0	0	13	10	0 10 100 1000 13 13 5 17	00	1 1
	(NO. EXAMINED) :	(5)	0) (0	2)(0)(0)(1) (1)(5)(5)(0)	(1)(5) (5) (6	(13)(13)((13)(13)(5)(12)	17)	
MALIGNANT LYMPHOMA (HISTIOCYTIC SARCOMA)		0	0	0	0	0	0	0	0	0	0 .	0	t.	
MONONUCLEAR CELL LEUKEMIA	MIA	0	0	0 0	0	0 0 0 0 1 1 2 0 4 4 2 7		1 1 2 0	0	7	7	4 4 2	7	1

TABLE 16 - M - 2 - 2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

.736	0 10 100 1000 13 13 5 17	(0)(0)	0 0 0 0
547-736	i	(0)(0)(0)(0)	0
365-546	0 10 100 1000 1 5 5 0	(0)(0)(0)(0)	0 0 0
36	1 1		0
	0 10 100 1000 2 0 0 1	0)(0)(0)(1)	0 1
1-364	0 10 100) (0	0
	1 1 1 1 1 1	J	0
PERIOD(DAYS) :	LEVEL (PPM) NO. NECROPSIED :		MALISNAHT FIBROUS HISTIOCYTOMA
	ORGAN FINDINGS	l 1	WALISNANT FIBRC

TABLE 16 - M - 2 - 3

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

	PERIOD(DAYS):	! ! ! !	1-364	1		! ! ! !	365-546	546	1 1 1 1 1	! ! ! !	547-736	! _	. 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 2	0 10 100 1000 2 0 0 1	100 10	000	0 1	10	0 10 100 1000	000	13	0 10 100 1000 13 13 5 17	100 1	1000
PERITONEUM	(NO. EXAMINED) :	6	(0)(0)(0)(0	0	ô	6	6	(0)(0)(1)(0)	6	(1)(1)(2)(1)	1) (1	2) (2	1)
FIBROSARCOMA		0	0	0	0	0	0	0	0	0	0	(-1	0
LIPCSARCOMA		0	0	0	0	0	0	₩.	0	0	0	0	
MESOTHELIOMA		0	0	0	0	0	0	0	0	€	Ħ	-	1

TABLE 16 - M - 2 - 4

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

MALE

	PERIOD(DAYS): 1-364	! ! ! ! !	365-546	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	1000	1	10 100 1000 0 10 100 1000 5 5 17
SPLEEN (NO. EXAMINED) :	(NO. EXAMINED) : (ł	2)(0)(0)(1) (1)(5)(5)(0)	(13)(13)(4)(17)
HEMANGIOSARCOMA		0 0 0	0 1 0 0	0 0 0

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FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

MALE

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PERIOD(DAYS) :		1	1-364	! ! !	! ! !	365-546	979	! ! ! !	547-736	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;
ORGAN FINDING	LEVEL (PPM) NO. NECROPSIED	0 0 1	2 0	0 10 100 1000 2 0 0 1	1000	0 1	10	0 10 100 1000 1 5 5 0	0 100 1000	0 10 100 1000 13 13 5 17	
	(NO. EXAMINED)	J	5 5 6	0) ((1)	-	7 (7	5) (5	0	~	
PAPILLARY ADENOMA				0 0	٥ .	0	0	0 0	0		

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

	STUDY NO. 83004	. t	0000	(0	0
MALE		547-736	0 10 100 1000 13 13 5 17	(0)(0)(1)(0)	0 0 1
		547	0 10	0) (0	0
NGS		 			-
FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS	EMIS	! ! ! ! !	000	(0)(0)(0)(0)	0
ASTIC	EXTR	546	0 10 100 1000 1 5 5 0	0) (0	0 0 0
NEOPL	ED IN	365-546	10 5	0 (0	0
ON 0F	KILL	! ! !	i i	0 0	0
IBUTI	ANIMALS FOUND DEAD OR KILLED IN EXTREMIS				
DISTR	d dNU		0 10 100 1000 2 0 0 1	(0) (0) (0) (0)	0
AND.	LS FC	197	10 100 1000	6	0 0
UENCY	ANIMALS	1-364	2 0 0 1	6	0
FREG			0 ~	6	0
		PERIOD(DAYS	LEVEL (PPM) NO. NECROPSIED	(NO. EXAMINED) :	T.
			ORGAN FINDINGS	ORAL CAVITY	SQUAMOUS CELL CARCINOMA

TABLE 16 - M - 2 - 7

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

	PERIOD(DAYS) :			1-364	-364			365-	365-546			547-736		
CRGAN	LEVEL (PPM) NO. NECROPSIED		5	10 1	2 0 0 1	00	0 4	10	0 10 100 1000 1 5 5 0	1000	13 13	100	1000	! ! !
TONGUE	(NO. EXAMINED) :) (0) (0	(0)(0)(0)(0)	6	0	(0) ((0)	(0)(0)(0)(0)	(1)(0)(0)(0)	(0)((0)	
FIBROMA			0	0	0 0	0	0	0	0 0 0	0	1 0 0	0	0	

TABLE 16 - M - 2 - 8

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

MALE

547-736	10 100 1000 0 10 100 1000 5 5 0 13 13 5 17	3)(0) (13)(12)(4)(16)	0 0 1 0 0	0 0 1 0 0
365-546	0 10 100 1000 1 5 5 0	(1)(3)(0	0 0
1-364	1	(2)(0)(0)(1) (1)(3)(3)(0)	0 0 0	0 0 0 0
PERIOD(DAYS):	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINED) :		
	ORGAN FINDINGS	JEJUNUM	ADENOCARCINOMA	LEIOMYOSARCOMA

TABLE 16 - M - 2 - 9

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

PERIOD(DAYS) :	PERIOD(DAYS):		1-364	7	365-546 547-736	547-736
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	!		100	0 10 100 1000	0 10 100 1000 13 13 5 17
Liver	(NO. EXAMINED) : (2)(2)) (0)	(0)(1)	(1)(4)(5)(0)	(13)(13)(5)(17)
HEPATOCELLULAR ADENOMA		0	0	0 0	0 0 0	0 1 0 0

TABLE 16 - M - 2 - 10

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

		 	! ! !										STUDY NO. 83004
	PERIOD(DAYS) :	! ! ! ! !	1-364	1-364			365-546	365-546	i ! ! ! !	ı	547-736	 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		10	10 100 1000 0 0 1	101		10	0 10 100 1000 1 5 5 0	- - - - - - - - - - - - - - - - - - -	0 10 100 1000 13 13 5 17	0 10	0 1000	! _
		(5) (0 0	2)(0)(0)(1)	1)	2)(0)(0)(1) (1)(3)(3)(0)	(3)((1)(3)(3)(0)	1	(13)(12)(5)(17)	2) (5)(17	(
ISLET-CELL ADENOMA		0	0	0 0	0	0	0	0	0	0 1 0 0	€1	0	

TABLE 16 - M - 2 - 11

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

		1 1 1 1	; ; ;	1									STUDY NO. 83004
	PERIOD(DAYS):		÷	1-364		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	365-546	9 7]]] !	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	547-736	36	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 8	100	10	0 10 100 1000 2 0 0 1	0 4	10	0 10 100 1000 1 5 5 0	00	0 13	10	0 10 100 1000 13 13 5 17	000
KIDNEYS	(NO. EXAMINED) :	2	0	0 0	5)(0)(0)(0)	(1)(3)(5)(0)	3) (2	2)(0	(0	(13)(12) ((13)(12)(5)(17)	(7)
ADENOMA		0 .	0		0	0	0	0	0	0	₩	0	0
MESENCHYMOMA	·		0		. 0	0	0	H	0	0	0	0	0
TRANSITIONAL CELL CARCINOMA	INOMA	0		0	0	0	0	0	0	.	0	0	0

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TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

MALE

STUDY NO. 83004 (13)(13)(5)(17) 10 100 1000 13 5 17 11 ~ 547-736 11 10 (1)(3)(5)(0) 10 100 1000 5 5 0 0 2 365-546 2 1 0 (NO. EXAMINED) : (2)(0)(1) 0 0 1 - 3640 o . LEVEL (PPM) : NO. NECROPSIED : PERIOD(DAYS): LEYDIG CELL TUMOR FINDINGS ORGAN TESTES

16 - M - 2 - 13TABLE

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

MALE

		1 1 1	!!!!!!!!!!!!	1 1 1 1 1		SIUDY NO. 83004
	PERIOD(DAYS) :		1-364			547-736
ORGAN FIHDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 0	10 100	0 10 100 1000 2 0 0 1	0 10 100 1000 1 5 5 0	0 10 100 1000 13 13 5 17
PITUITARY GLAND		l	2)(0)(0)(1	0) (1)	2)(0)(0)(1) (1)(5)(5)(0)	(12)(12)(5)(16)
АБЕИОМА		0	0	0 0 0	0 8	6 6 1 8

TABLE 16 - M - 2 - 14

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

			,			1	
			1-564		365	365-546	547-736
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 0	10 10	10 100 1000 0 0 1	0 10	0 10 100 1000 1 5 5 0	
THYROID GLANDS	••	(2)() (0	(0)(0)(1)	(1)((1)(3)(5)(0)	(12)(12)(3)(17)
G-CELL ADENOMA		0	0	0	0	0 0 0	1 3 , 1 1

TABLE 16 - M - 2 - 15

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

MALE

STUDY NO. 83004 (12)(12)(5)(16) 10 100 1000 13 5 17 547-736 ~ ANIMALS FOUND DEAD OR KILLED IN EXTREMIS (1)(4)(4)(0) 10 100 1000 5 5 0 365-546 0 7 (NO. EXAMINED) : (2)(0)(0)(1) 10 100 1000 0 0 1 1-364 0 2 LEVEL (PPM) : NO. NECROPSIED : PERIOD(DAYS) PHEOCHROMOCYTOMA CORTICAL TUMOR GANGLIONEURONA NEUROBLASTOMA ADRENAL GLANDS ORGAN FINDINGS

TABLE 16 - M - 2 - 16

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

MALE

		1 1 1	!	1	1	!	1	! ! ! !	1				STUDY	STUDY NO. 83004
	PERIOD(DAYS)	.	1	1-364	-364	!		365	365-546		54	547-736		
CRGAN FINDINGS	LEVEL (PPM) NO. NECROPSIED	! ! ! !	2 2	10 100 1000 0 0 1	0 100	100	1	0 10	10 100 1000 5 5 0	1000	0 1 13 1	0 10	10 100 1000 13 5 17	
XX E11 E	(NO. EXAMINED) :		2)(0)() (0) (0	1)		1)(3	(1)(3)(5)((0)	(13)(13)(2)(15)	3) (.) (17)	1 1 1 1 1 1 1 1 1
KERATOACANTHOMA			0	0	0	0	ŭ	0	0	0	0		0	
SEBACEOUS SQUAMOUS CELL CARCINOMA	- CARCINOMA		0	0	0	0	G	0	0	0	0	0	٥	
SGUAMOÙS CELL PAPILLOMA		_	0	0	0	0	0	0	0	0	0	0	0	
SQUAMOUS CELL CARCINOMA			0	0	0	0	0	0	0	0	0	0 1	0	

TABLE 16 - M - 2 - 17

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

MALE

STUDY NO. 83004 (13)(13)(5)(17) 10 100 1000 13 5 17 547-736 ~ ANIMALS FOUND DEAD OR KILLED IN EXTREMIS (1)(3)(5)(0) 10 100 1000 5 5 0 365-546 (NO. EXAMINED): (2)(0)(1) 1-364 LEVEL (PPM) : NO. NECROPSIED : PERIOD(DAYS) MALIGNANT FIBROUS HISTIOCYTOMA SQUAMOUS CELL CARCINOMA RHABDOMYOSARCOMA SKIN (SUBCUTIS) FIBROSARCOMA MESERCHYMOMA FINDINGS FIBROMA ORGAN

TABLE 16 - M - 2 - 18

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

MALE

]]] 1	 	1			STUDY NO. 83004
	PERIOD(DAYS) :		1-364			546	547-736
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 0 1	10 1	0 10 100 1000 2 0 0 1	1 1 1 1	0 10 100 1000 1 5 5 0	0 10 100 1000 13 13 5 17
MAMMARY GLAND	(NO. EXAMINED) :	5) (2) (0	2)(0)(0)(0)	(1)(3)(5)(0)	(13)(13)(5)(17)
FIBROADENOMA		0	0	0	0	0	0 0 1 0
PAPILLARY ADENOMA		0	0	0 0		0 0 0	0 1 0 0

TABLE 16 - M - 2 - 19

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

MALE

		1 1 1 1 1	1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			STUDY NO. 83004
	PERIOD(DAYS):		1-364		365-546	! ! !	547-736
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 0 0	10 10	10 100 1000	0 10 100 1000 1 S S 0	000	0 10 100 1000 13 13 5 17
BRAIN		5) (2)(0	2)(0)(0)(1)	0)(0)(1) (1)(3)(5)(0)	0)	(13)(12)(5)(17)
ASTROCYTOMA		0	0	0	0	0	0 0 0 1

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TABLE

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004 (NO. EXAMINED): (31)(0)(0)(35)
 10
 100
 1000

 33
 31
 35
 0 0 PERIOD(MONTHS) : LEVEL (PPM) : NO. NECROPSIED : MONONUCLEAR CELL LEUKEMIA MULTIPLE ORGANS FINDINGS ORGAN

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FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

FEMALE

STUDY NO. 83004 (NO. EXAMINED) : (30)(0)(35) 10 100 1000 33 31 35 0 0 31 0 LEVEL (PPM): NO. NECROPSIED: PERIOD(MONTHS): ORGAN FINDINGS THYMOMA THYMUS

TABLE 16 - F - 1 - 3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY

FEMALE

STUDY NO. 83004 ANIMALS KILLED ON SCHEDULE (NO. EXAMINED) : (31)(0)(35) 10 100 1000 33 31 35 0 0 o . LEVEL (PPM) : NO. NECROPSIED : PERIOD(MONTHS) : MALIGNANT LYMPHOMA FINDINGS ORGAN SPLEEN

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FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

				STUDY NO. 83004
	PERIOD(MONTHS):		24	24
		31	0 10 100 1000 31 33 31 35	000
		i 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
רחאפ	(NO. EXAMINED) : (31)(0)(0)(35)	(31)(0)(0)(0	35)
PAPILLARY ADENOMA		5	0	0

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FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

				STUDY NO. 83004
	PERIOD(MONTHS):	1	24	
		31	10 100 1000 33 31 35	
PANCREAS	(NO. EXAMINED) : (31)	(31)(): (31)(0)(0)(35)	
ISLET-CELL ADENOMA			. 0 0 1	

TABLE 16 - F - 1 - 6

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

FEMALE

					STUDY NO. 83004
	PERIOD (MONTH'S) :		24	! ! ! ! ! !	24
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	1	10	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
	(NO. EXAMINED) :	(31)() (0	(31)(0)(35)	1)(0)(0)(35)
GRANULOSA-THECA CELL TUMOR	UMOR	(-1	0	0	

16 - F - 1 - 7 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

FEMALE

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004 (NO. EXAMINED) : (31)(0)(35)
 10
 100
 1000

 33
 31
 35
 0 0 S 0 0 0 0 0 0 31 0 S LEVEL (PPM): NO. NECROPSIED: PERIOD(MONTHS): ADENOCARCINOMA ORGAN FINDINGS LEIOMYOMA ADENOMA POLYP UTERUS

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FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

FEMALE

				200EG ON KORLS	2007
	PERIOD(MONTHS):	 	24	PERIOD(MONTHS): 24	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		0 10 100 1000 31 33 31 35	0 1000 1 35	
VAGINA	(NO. EXAMINED) : (_	0)(0	31)(,0)(,0)(,35)	1 1 1 1
POLYP		0	0	0 1	

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FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

FEMALE

2.4	0 10 100 1000 31 33 31 35	1)(0)(0)(3)	
PERIOD(MONTHS) :	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINED) : (
	ORGAN FINDINGS	CLITORAL GLAND	ADENOCARCINOMA 1 0 0 3

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FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

FEMALE

		1 1 1 1 1			STUDY NO. 83004
	PERIOD(MONTHS):		24	24	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	31	0 10 100 1000 31 33 31 35		
AND	(NO. EXAMINED) : ((31)(31)(0)(0)(35)	31)(0)(0)(35)	
ADENOMA		11	0 0 12		

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FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

FEMALE

	100 1000 31 35	1 1 1	м	0
.+	10 100 1000 33 31 35	0)(0)(34	0	0
24	i	0	0	0
		(31)	ω	₽
PERIOD(MONTHS) :	LEVEL (PPM) : NO. NECROPSIED :			
	ORGAN FIRDINGS	SON	C-CELL ADENOMA	FOLLICULAR ADENOMA

	STUDY
16 - F - 1 - 12	INHALATION TOXICOLOGICAL - IN FISCHER RAT
TABLE	CARCINOGENIC OF METHANOL
	AND
	CHRONIC

ANIMALS KILLED ON SCHEDULE

FEMALE

STUDY NO. 83004 (NO. EXAMINED) : (31)(33)(31)(35) 10 100 1000 33 31 35 Ø 31 PERIOD(MONTHS): LEVEL (PPM) : NO. NECROPSIED : PHEOCHROMOCYTOMA ADRENAL GLANDS ORGAN FINDINGS

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TABLE

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

FEMALE

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

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TABLE

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

FEMALE

ANIMALS KILLED ON SCHEDULE

STUDY NO. 83004

	0 10 100 1000 31 33 31 35	31)(0)(0)(35)	0 0
	0 10 100	(31)(0)	1 0
PERIOD(MONTHS):	LEVEL (PPM) : NO. NECROPSIED :	(NO. EXAMINED) :	44
	ORGAN LEVEL (PPM) : FINDINGS NO. NECROPSIED : '	SKIN	SQUAMOUS CELL PAPILLOMA

	STUDY
- 15	TOXICOLOGICAL RAT
16 - F - 1	INHALATION IN FISCHER
TABLE	CARCINOGENIC OF METHANOL
	AND
	NIC

FEMALE

					STUDY NO. 83004
	PERIOD(MONTHS):		24	24	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	I M	0 10 100 1000 1 33 31 35	. 1000 35	
		1			
SVIN (SUBCOLIS)	(NO. EXAMINED) :	(31)(1)(0)(0)(35))(35)	
					4.
FIBROMA		0	0	-	

TABLE 16 - F - 1 - 16

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

FEMALE

				STUDY ND STOOL	70
	PERIOD(MONTHS):	1 	24		1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	31	10 1	10 100 1000 33 31 35	
MAKKARY GLAND	(NO. EXAMINED) : (31)(0)(0)(35)	(31)()(0		
АБЕКОМА		0	0	0 1	
FIBROADENOMA		7	0	0 1	

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FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

FEMALE

		! ! ! !	1		STUDY NO. 83004
	PERIOD(MONTHS) :		5.4		PERIOD(MONTHS) : 24
ORGAN FIMDINGS		31	10 1	0 10 100 1000 31 33 31 35	
BRAIN	(NO. EXAMINED) :	(31)() (0	0) (3	(31)(0)(0)(35)
ASTROCYTOMA		Н	0	0	

TABLE 16 - F - 2 - 1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FEMALE

		! ! !	1] 		STUDY NO. 83004
	PERIOD(DAYS):		1-364		365-546	547-743
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		10	0 10 1000 1 0 0 0	10	0 10 100 100 19 19 19 17
MULTIPLE ORGANS	(NO. EXAMINED) : .(;) (0	1)(0)(0)(·0)	(1)(0)(2)(0)	(19)(19)(19)(17)
MONONUCLEAR CELL LEUKEMIA	EMIA .	0	0	0	1 0 1 0	8 11 8 5
MYELOCYTIC LEUKEMIA		0	0	0 0	0 0	0 0 1 2

TABLE 16 - F - 2 - 2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

												LS	VOCER ON YOUTS
	PERIOD(DAYS):		1-364	64	 	1 1 1	365-546	546	; ! ! ! !		547-743	 	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 1	10	10 100 1000	000	10 1	1	10 100 1000 0 2 0	0000	0 19	10 100	10 100 1000 19 19 17	
PERITONEUM	(NO. EXAMINED) : '(_	60	(0 ,) (0) (0) (0	(0,	(0)	(0))(0)(0)(0)	(0)	(1)(0)(1)() (0	1)(2)	
MALIGNANT FIBROUS HISTIOCYTOMA	TIOCYTOMA	0 .	0	0	٥ .	0	0	0	. 0	0	0	0	
MESENCHYMOMA		0	0	0	0	0	0	0	0	0	0	0 1	
MESOTHELIOMA		0	0	0	0	0	0	0	0	₽	0	0	
S A R C O M A		0	0	0	0	0	0	0	0	0	0	. 1	

16 - F - 2 - 3TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FEMALE

STUDY NO. 83004 (19)(19)(18)(17) 10 100 1000 19 19 17 2 0 547-743 0 0 0 ANIMALS FOUND DEAD OR KILLED IN EXTREMIS (1)(0)(2)(0) 10 100 1000 0 2 0 0 0 365-546 0 0 7 (NO. EXAMINED) : (1)(0)(0)(0) 10 100 1000 0 0 0 0 0 0 0 LEVEL (PPM) : NO. NECROPSIED : PERIOD(DAYS) : PAPILLARY ADENOMA ORGAN FINDINGS 1016

TABLE 16 - F - 2 - 4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FEMALE

		! ! ! !	 				İ			·S	STUDY NO. 83004
	PERIOD(DAYS) :		1-364	7,		: 1 1 1 1 1	365-546	365-546	: ! ! ! !	547-743	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		10		000	100	10	0 10 100 1000 1 0 2 0	0000	0 10 100 1000 19 19 19 17	
TONGUE	(NO. EXAMINED) : ((1) () (0	1)(0)(0)(0)	(0)((0)	(0)	(0)(0)(0)(0)	(0)	(5)(0)(0)(0)	
KERATOACANTHOMA		Н	0	0	0	0	0	0 0	0	0 0	
SQUAMOUS CELL CARCINOMA	¥.	0	0	0	0	0	0	0 0	0	2 0 0	

TABLE 16 - F - 2 - 5

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

					STUDY NO. 83004
	PERIOD(DAYS) :	1	1-364	365-546	547-743
ORGAN FINDINGS	: IED :	0 10	10 100 1000 0 0 0	0 10 100 1000	0 10 100 1000 19 19 19 17
	(NO. EXAMINED) :	1)(1)(0)(0)(0)	(1)(0)(1)(0)	· ~
KERATOACANTHOMA		1 0	0 0	0 0	0 0 0

16 - F - 2 - 6 TABLE

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

FEMALE

					The state of the s	
		!				STUDY NO. 83004
	PERIOD(DAYS):		1-364	1 † 1 1 1 1 1	365-546	547-743
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	! ! !	10 10	0 10 100 1000 1 0 0 0	0 10 100 1000 1 0 2 0	0 10 100 1000 19 19 19 17
PANCREAS	 	(1)((0)(0	(0)	(1)(0)(1)(0)	
ISLET-CELL ADENOMA		0	0	0	0 0	0 0 1 2

TABLE 16 - F - 2 - 7

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FEMALE

STUDY NO. 83004 (18)(19)(19)(17) 10 100 1000 19 19 17 0 0 0 19 0 0 ANIMALS FOUND DEAD OR KILLED IN EXTREMIS (1)(0)(2)(0) 10 100 1000 0 2 0 0 0 0 0 365-546 0 0 0 0 6 10 100 1000 0 0 0 0 0 (NO. EXAMINED): (1)(0)(0)(0 1-364 0 0 0 0 PERIOD(DAYS): LEVEL (PPM) NO. NECROPSIED ADENOCARCINOMA MESENCHYNOMA FINDINGS KIDNEYS

TABLE 16 - F - 2 - 8

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FEMALE

		1	1				STUDY NO. 83004
	PERIOD(DAYS) :		1-364	1 1	365-546	546	547-743
ORGAN FINDINGS		101	100	10 100 1000 0 0 0	0 10	0 10 100 1000 1 0 2 0	0 10 100 1000 19 19 29 17
OVARIES	(NO. EXAMINED)	(1)()(0)(1)(0)(0)(0)	(1)(0)(0)(0)	(0)(0)	
GRANULOSA-THECA CELL TUMOR	TUMOR	0	0	0	0	0 0	0 0 0 1

TABLE 16 - F - 2 - 9

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FEMALE

		1 1 1	1	!	1	!	1	1 1	1 1 1	1			STUDY NO. 83004
	PERIOD(DAYS) :	1	1-364	54	1		365-546	246		 	547-743	43	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	1	10	100 1000	000	0 1	100	10 100 1000 0 2 0	000	19	10	100 1000 19 17	200 17
UTERUS	(NO. EXAMINED) :	(1)(0 0	6	(0	(1)()(0)	1)((0	(18)(18)(18)(17)	18) (18)(17)
ENDOMETRIAL STROMAL SARCOMA	SARCOMA	0	0	0	0	0	0	0	0	0	0	←	Ν
FIBROMA		0	0	0	0	0	0	0	0	0	0	0	е
GRANULAR MYOBLASTOMA		0	0	0	0	0	0	0	0	0	41	0	0
HEMANGIOMA		0	0	0	0	0	0	0	0	0	0	←	0
LEIOMYOSARCOMA		0	0	0	0	0	0	0		0	0	1	0
		0	0	0	0	0	0	0	0	~	₽	~	1

TABLE 16 - F - 2 - 10
HRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STU

STUDY NO. 83004 (17)(19)(17)(17) 10 100 1000 19 19 17 FEMALE 547-743 19 CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS ANIMALS FOUND DEAD OR KILLED IN EXTREMIS (1)(0)(1)(0) 10 100 1000 0 2 0 365-546 (NO. EXAMINED) : (1)(0)(0)(0) 10 100 1000 0 0 0 1-364 PERIOD(DAYS): LEVEL (PPM)
NO. NECROPSIED

0

0

0

0

0

0

0

0

0

0

0

MESENCHYMOMA

FINDINGS

VAGINA

TABLE 16 - F - 2 - 11

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

FEMALE

						STUDY NO. 83004
	PERIOD(DAYS):		1-364	! ! ! !	365-546	547-743
ORGAN FINDINGS	1		0 10 100 1000 1 0 0 0 0	1000	0 10 100 1000	0 10 100 1000 19 19 19 17
CLITORAL GLAND	! ! !	0) (0	(0)(0)(0)(0	i	(0)(0)(0)(0)	(1)(1)(1)(2)
ADENOCARCINOMA		0		0	0 0	ר ד ' ד ד
SGUAMOUS CELL CARCINOMA	_	0	0	0	0 0	0 0 0 1

TABLE 16 - F - 2 - 12

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FEMALE

		; ; ; ;	; ; ; ;	; ; ; ;		STUDY NO. 83004
	PERIOD(DAYS):		1-364		365-546	547-743
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :		10 1	10 100 1000	0 10 100 1000 1 0 2 0	
PITUITARY GLAND		(1)(0) (0	1)(0)(0)(0)	(1)(0)(1)(0)	
ADENOCARCINOMA		0	0	0	0 0 1 0	0 0 0
ADENOMA		0	0	0	0 0 0	9 9 6 9

TABLE 16 - F - 2 - 13

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FEMALE

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	i	1		1 1 1	1 1 1	1 1 1 1	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1			STUDY NO. 83004
	PERIOD(DAYS):		1-364	75			365-546	79		 	547-743	
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	101	10	10 100 1000	000	1 0 1	10	0 10 100 1000 1 0 2 0	0000	0 19	0 10 100 1000 19 19 19 17	1000
THYROID GLANDS			0 (0)	1)(0)(0)(0)	(0	(1)() (0	(1)(0)(1)(0)	(0)	(18)((18)(18)(17)(15)	(15)
C-CELL CARCINOMA		0	0	0	0	0	0	0	0	0	0 0	0
C-CELL ADENOMA		0	0	0	0	0	0		0	7	0	N
PAPILLARY ADENOMA		0	0	0	0	0	0	0	0	0	0 1 0	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

FEMALE

		1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	PERIOD(DAYS) :	! ! ! !	1-364	1-364		547-743
ORGAN FINDINGS		0 4	10 1(10 100 1000 0 0 0	0 10 100 1000 1 0 2 0	0 10 100 1000 19 19 19 17
ADREWAL GLANDS		(1)() (0	1)(0)(0)(0)	(1)(0)(1)(0)	(17)(18)(17)(15)
PHEOCHROMOCYTOMA		0	0	0	0 0 0	1 0 1 1

TABLE 16 - F - 2 - 15

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

STUDY NO. 83004

FEMALE

	PERIOD(DAYS) :		1-364	 	 	! ! ! ! !	1	365-546	 	365-546
ORGAN FINDINGS			0 10 100 1000 1 0 0 0	00 10	000	104	0 10 100 1000 1 0 2 0	100	1000	0 10 100 1000 19 19 19 17
USCLE (0. FEMORIS)	(NO. EXAMINED) :		1)(0)(0)(0)) (0	1	(1)(0)(1)(0)	(0) (0)(1)	(0)	(18)(18)(18)(17)
RHABDOMYOSARCOMA		0	0	0 0	0	0	0 0 0	0	0	0 0 0 1

TABLE 16 - F - 2 - 16

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FEMALE

STUDY NO. 83004 (18)(18)(18)(17) 10 100 1000 19 19 17 0 0 4 547-743 0 0 19 0 0 ANIMALS FOUND DEAD OR KILLED IN EXTREMIS (1)(0)(1)(0) 10 100 1000 0 2 0 0 0 0 0 365-546 0 0 0 (NO. EXAMINED) : (1)(0)(0)(0) 10 100 1000 0 0 0 0 0 0 1-364 0 0 0 0 PERIOD(DAYS) : LEVEL (PPM) NO. NECROPSIED SQUAMOUS CELL CARCINOMA BASAL CELL TUMOR FINDINGS ORGAN SKIN

TABLE 16 - F - 2 - 17

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

FEMALE

STUDY NO. 83004 (18)(18)(18)(17) 10 100 1000 19 19 17 0 0 547-743 0 0 19 0 0 (1)(0)(1)(0) 10 100 1000 0 2 0 0 0 0 0 365-546 0 0 0 0 (NO. EXAMINED) : (1)(0)(0) 0 10 100 1000 0 0 0 0 0 0 1-364 0 0 0 PERIOD(DAYS) : LEVEL (PPM) : NO. NECROPSIED : SKIM (SUBCUTIS) MESENCHYMOMA FINDINGS LIPOMA ORGAN

TABLE 16 - F - 2 - 18
CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY
OF METHANOL IN FISCHER RAT

FEMALE

STUDY NO. 83004 (19)(18)(18)(17) 10 100 1000 19 19 17 S 0 . O 547-743 M 0 19 0 ANIMALS FOUND DEAD OR KILLED IN EXTREMIS (1)(0)(1)(0) 10 100 1000 0 2 0 0 0 0 0 0 0 365-546 0 0 0 0 0 0 (1)(0)(0)(0) 10 100 1000 0 0 0 0 0 0 0 0 0 1-364 0 0 0 7 0 0 0 0 (NO. EXAMINED) : PERIOD(DAYS): LEVEL (PPM) NO. NECROPSIED PAPILLARY ADENOMA FIBROADENOMA MAMMARY GLAND FINDINGS ADENOMA ORGAN

TABLE 16 - F - 2 - 19

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN FISCHER RAT

FREQUENCY AND DISTRIBUTION OF NEOPLASTIC FINDINGS

ANIMALS FOUND DEAD OR KILLED IN EXTREMIS

FEMALE

		.	i i i i	. !	İ	STUDY NO. 83004
	PERIOD(DAYS) :		1-364		l I	547-743
ORGAN FINDINGS	LEVEL (PPM) : NO. NECROPSIED :	0 11	0 10 100	0 10 100 1000	0 10 100 1000	0 10 100 1000 19 19 19 17
B R A I N	(NO. EXAMINED) : (1) () (0	1)(0)(0)(0)		(19)(18)(17)(17)
ASTROCYTOMA		0	0	0	0 0 0	1 1 0 0
MEDULLOBLSTOMA		0	0	0 0 0	0 0 0	1 0 1 0